APTD 0608-

PB196633

COAL CLEANING PLANT PROTOTYPE PLANT DESIGN DRAWINGS

PART - VIII

a report to

PROCESS CONTROL ENGINEERING DIVISION

NATIONAL AIR POLLUTION CONTROL ADMINISTRATION

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

CONTRACT NO. PH 22-68-59

McNALLY PITTSBURG MANUFACTURING CORPORATION

Reproduced by
NATIONAL TECHNICAL
INFORMATION SERVICE
Springfield, Va. 22151

40

STANDARD TITLE PAGE FOR TECHNICAL REPORTS	1. Report No. APTD-0608	2. Govt. Accession No.	3. Recipient's Catalog No.

4. Title and Subtitle

Coal Cleaning Plant Prototype Plant Design Drawings

Part VIII

5. Report Date November 1969

6. Performing Organization Code

7. Author(s)

8. Performing Organization Rept. No.

9. Performing Organization Name and Address

McNally Pittsburg Manufacturing Corporation
Drawer D
307 West 3rd Street
Pittsburg, Kansas 66762

10. Project/Task/Work Unit No.

11. Contract/Grant No. PH 22-68-59

12. Sponsoring Agency Name and Address

Process Control Engineering Division
National Air Pollution Control Administration, DHEW
Cincinnati, Ohio 45227

13. Type of Report & Period Covered

14. Sponsoring Agency Code

15. Supplementary Notes

16. Abstracts

Eighteen drawings including a flow diagram, plans, elevations, sections, and a general plot plan are presented. They are intended to be used together with "A Study on Design and Cost Analysis of a Prototype Coal Cleaning Plant" and "Coal Cleaning Plant; Prototype Plant Specifications", each of which is bound separately.

17. Key Words and Document Analysis. (a). Descriptors

Air pollution
Coal preparation
Cleaning
Prototypes
Engineering drawings

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group 13/02, 21/04, 08/09

18. Distribution Statement	19. Security Class (This Report)	21. No. of Pages
Unlimited	UNCLASSIFIED	21
	20. Security Class. (This Page) UNCLASSIFIED	22. Price

FORM NBS-867(1-70)

This report was furnished to the Air Pollution Control Office by the McNally Pittsburg Manufacturing Corporation in fulfillment of Contract No. PH 22-68-59.

COAL CLEANING PLANT PROTOTYPE PLANT DESIGN DRAWINGS

Part VIII
November 1969

a report to

PROCESS CONTROL ENGINEERING DIVISION

NATIONAL AIR POLLUTION
CONTROL ADMINISTRATION

U. S. DEPARTMENT OF HEALTH,
EDUCATION, AND WELFARE

CONTRACT NO. PH 22-68-59

McNALLY PITTSBURG MANUFACTURING CORPORATION

CONTENTS

PART I to VI ---	A Study on Design and Cost Analysis of a Prototype Coal Cleaning Plant	Bound Separately
PART VII ---	Prototype Plant Specifications	Bound Separately
PART VIII ---	Prototype Plant Design Drawings:	
	Flow Diagram of Proposed Plant	E-4065-A
	Plant Design Drawings	E-4065-B
		E-4065-C
		E-4065-D
		E-4065-E
		E-4065-F
		E-4065-G
		E-4065-H
		E-4065-J
		E-4065-K
		E-4065-L
		E-4065-M
		E-4065-N
		E-4065-P
		E-4065-P_1
		E-4065-P_2
		E-4065-P_3
		E-4065-Q

A B C D

11.5' PORTABLE SHAKE OUT

R.O.M. COAL HOPPER (PR) (2)

SLOPE TRACKS GRAVITY FEED

42" R.O.M. RECIPROCATING FEEDER (3)

400 T.P.H. R.O.M. COAL

48 x 10 R.O.M. SCRAPER CONV. (PR) (5)

400 T.P.H. R.O.M. COAL 18" MAX. LUMP

48 x 14 BREAKER FEED SCRAPER CONV. (PR) (6)

6'-0 x 8'-0 R.O.M. SCREEN (PR) (7)

9'-0" x 17'-0 ROTARY BREAKER (PR) (8)

ROCK BIN WT GATE (P) (11) (1A)

4" x 0

4" x 0 RAW COAL CRUSHER (4)

1½" x 0

BELT SCALE (15)

400 T.P.H.

30" RAW COAL STORAGE BELT (14)

TO PLANT DRAIN, SUMP

R.O.M. HOPPER SUMP PUMP (36)

20' McNALLY H.M. CYCLOID (38)

ALTERNATE CIRCUIT

24" McNALLY H.M. CYCLOID (38)

35T 900G

60T 1125G

4'-0 WIDE CROSS-FLOW SCREEN (42)

2800

35T 19G

5'-0 x 16'-0 FLOAT (43)

2'-0 WIDE CROSS-FLOW SCREEN (48)

685G RINSING SCREEN

1600

5'-0 x 16'-0 SINK RINSING SCREEN (49)

1500

536

6856

8626

3846

2996

9156

FROM SETTLING CONE OVERFLOW 3036

467G

1426

TO RINSING SCREENS 1267G

PUMP (37)

1268G

CLARIFIED WATER SUMP

20'-0" DILUTE MEDIUM THICKENER (54)

2436

PUMP (58)

SEAL WATER BOOSTER PUMP (135)

TO PUMP SEALS 50G

TO CLARIFIED WATER SUMP 467G

WASH DOWN WATER

FRESH WATER POND NO 1

FRESH WATER PUMP NO 1 (PA) (132)

'P' LINE

20T 440G FROM REFUSE

PUMP

WASTE POND

FRESH WATER POND NO 2

FRESH WATER PUMP NO 2 (134)

60T 25G 1½"x⅜", 1½"x14M, ¾"x⅜", ¾"x14M OR ⅜"x14M

DILUTE MEDIUM DISTRIBUTOR (59)

248G

DOUBLE DRUM MAGNETIC SEPARATOR (60)

OVER O'FLOW 50G

148G

15 TON RAW MAGNETITE BIN (63)

SCREW FEEDER (64)

326

SPLITTER

DENSOMETER

RECORDING CONTROLLER (62)

DP CELL

LEVEL CONTROLLER

H.M. CYCLOID FEED SUMP (34)

PUMP (57)

EMER. O'FLOW

6536

7036

4976

EMER. O'FLOW

FLOTATION FEED SUMP (91)

PUMP (92)

50T 26G

LOADING BOOM (PR) (109)

CAR RETARDER (PR) (111)

20T 116

SECONDARY CRUSHER ⅜"x0 OR 14M x 0 (72)

⅜"x0 OR 14M x 0

EMER.

TO RINSING

A

E F G H

LEGEND

Coal	
Middlings	
Refuse	
Pyrite	
Heavy Medium	
Dilute Medium	
Fresh Water	
Clarified Water	
Cyclone O'Flow	
Settling Cone O'Flow	
Mag. Sep. Tailings	
Filtrate	
Effluent & O'Flows	
Air Control Lines	
T = Max Tons Per Hour	
G = Gallons Per Minute	
( ) Indicates Sampler No	
[S] Indicates A Sampler	

⊙ Dust Suppression Sprays
(P) Present Equipment
(PR) Present Revised Equipment
⬡ Unit Numbers

400 T.P.H. Max 1½" x 0
400 T.P.H. 30" Raw Coal Transfer Conv. (17)
(2) 4000 Ton Raw Coal Storage Bins (19)
Suspended Magnet (18)
75 T.P.H. Max 1½" x 0
66
Belt Scale (27)
(22) (2) Raw Coal Vibrating Feeders
(24) (2) 24" Raw Coal Conveyors
(26) 24" Washery Feed Conv.
1½" x 0
(28) Raw Coal Crusher
¼" x 0 or ⅜" x 0
(2) [S] (30)
(6) 8" Secondary McNally Visman Tricones
(21) [S] (117) 15T 409G
3006
(3) [S] (34) ⅜" x 0 or 14M x 0
5'-0 x 16'-0 R.C. Screen (32)
(4) [S] (75)
⅜" x 0
Splitter Box
20T 454G
(22) [S] (121)
Alternate Circuit
126G
Rotary Distributor (122)
Stationary Distributor (118)
4T 45G
11T 125G
(2) Deister Ore Tables (123)
(1) Deister Coal Table (119)
8T 180
(24) [S] (124)
(25) [S] (23)
3T 300G
20T 1240G
(8) 8" Primary McNally Visman Tricones (78)
35T 794G
25T 715G
(20) [S] (90) 570G
Splitter Box
25T 720G
(3) 14" McNally Classifying (85) Cyclones
(17) [S] (85)
2'-0 Wide Vibrating Cross-Flow Screen (84)
25T 150G
83G
(18) [S] (86) 25T 67G
(19) [S] (87)
Settling Cone (P) (125)
497G To Fine Coal Sump
303G To Clarified Water Sump
To Waste Pond 428G
Secondary Crusher ⅜" x 0 or 14M x 0 (72)
(14) 20T 116
(74)
15T 221G
Splitter Box
20T 454G
570G
35T 242G
(16) [S] (82)
(15) [S] (80)
20T 116
Flotation Cells (94)
5T 108G
(26) [S] (96)
(99) [S]
20T 577G
78G
By-Pass
Reagent Tanks (103)
Plunger Pumps
To Waste Pond 440G 20T
(28)
5T 88G
(130) Pump
(129) (PR) Refuse Sump
Emer. O'Flow
Emer. O'Flow
(101) Tailings Sump
(102) Pump
(93) [S] (25)
497G
(76) Fine Coal Sump
Pump (77)
(113) Secondary Fine Coal Sump
Pump (114)
Emer. O'Flow
(81) Classifying Cyclone Feed Sump
Pump (82)
Pump (72)
Emer. O'Flow
656 Dryer Effluent
To Sink Ringing Screen 656
Emer. O'Flow To Waste
(134) Drainage Sump & Pump
Plant Air Compressor (131)
Moisture Trap (18)
Receiver
Silencer
Clean Coal Filter (97)
73G
Vacuum Pump
Filtrate Pump
Centripuge (44)
45T 216
656
(49) [S] (11)
Tell-Tale Screen
(50)
65G
Mixing Conv.
To Drainage Sump
B
80T 28G
(111) Car Retarder (PR)
24 x 4 Clean Coal Scraper Conv. (108)
(10) [S] (104)
80T 28G
24" Washed Coal Belt (PR) (104)
Belt Scale (105)

McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	Proposed Coal Preparation Pilot Plant	Project No.	Unit No. — Sales Order No. — 62521 (End use number)		
This drawing is our property and must not be used except in connection with our work — All rights of design or invention reserved	Flow Diagram for Department of Health, Education and Welfare	Scale None — 1 Pt.	Drawing No. E-4065-A		1
Drawn By Dorsey 8-8-64	SEN		7-12-65		
Modified	SEN		8-17-65		

H A B C D

FRESH WATER POND

② FRESH WATER PUMPS

(PR) BUILDING

② DOOR

② PIPE

TO PLANT

H

G

(PA) R.O.M. SECTION

② STL OVER HOPPER

② HOPPER

② FEEDER

② RAW CO

② OUT DOOR TRANSFORMERS THIS AREA - USE PRESENT CONC. PADS AND OVERH SUPPORT STL.

100'-0±

100'-0±

28'-0

(P) SETTLING CONE 50'-0 DIA.

1

5'-3

7'-0

2

17'-0

3

19'-9

4

POWER ② TRANSFORMERS 1000 KVA EA.

(P) PE

(PA) CHANGE ROOM

② WINDOWS T REQ'D 20"x30"

(4) ② SHOWERS

② 120 GAL HOT WATER TANK SKW

② DOOR 2

SPACE

2-② LAVATORIES
1-② STOOL
2-② URINALS
② PLUMBING

(PA) 48"x10" R.O.M. SCRAPER CONV.

R.O.M. CONV.

② SIDEWALL FLUE VENT

② SUMP PUMP

② REFUSE PUMP

GAS HEATER 'A' FLOOR MOUNTED

34'-7½ DIA.

(PA) REFUSE SUMP

10'-9

(PAM) 24" CLEAN COAL CONV.

② TAILING'S PUMP

② McPITT R SAMPLER

② SAMPLER

② 24"ø CLEAN COAL CONV. 2

(PA) 48"x14" SCRAPER CONV. 1 (R.O.M.) COAL TO ROTARY BREAKER

(PA) CONC. TAILING'S SUMP

9'-6

② CYCLOID'S SUMP & PU

DRY ROOM EL. 646'-0

10'-0

20'-0

(PA) 1) CONTROL CAB NEW WIRES 2

20'-6

10'-6

17'-4½

17'-4½

LEGEND

② - S.O.G2521 (NEW)
(P) - PRESENT
(PA) - " " ALTERED
(PAM) - " " " " MOVED

A

F

N

RAW COAL TRACK

TRANSFORMERS
USE PRESENT
AND OVERHEAD
STL

(P) FENCE

(P) STACK 2

(P) ROCK BIN

'P' STACK

@ PLUG VALVE

@ ALTERNATE PUMP

@ SEAL TANK

@ DILUTE MAGNUM THICKENER 90'-0" DIA.

@ SAMPLER 2

@ VACUUM PUMP

@ 18" SCREW CONV.

@ SAMPLERS

@ CLARIFIED WATER SUMP & PUMP

@ FINE COAL SUMP & PUMP

@ GAS HEATER 'B' FLOOR MOUNTED

@ DENSOMETER

@ CYCLOID FEED SUMP & PUMP

@ SAMPLERS

@ DUCT BELOW EL 614'-0

@ GAS HEATER 'C' HORIZ. SUSPENDED BELOW EL 614'-0

RUN CRUSHER

@ ELEVATOR

@ FLOTATION FEED SUMP & PUMP

OVER EL 614'-0

BELOW EL 614'-0

DUCT BELOW EL 614'-0

(P) TRACK N° 6

TRACK N° 5 (P)

TRACK N° 4 (P)

200'-0" (MIN)

300'-0" (NTS)

(PA) TRUCK SCALE

@ PRINTOUT & SCALEHEAD

(P) SCALE HOUSE

PLAN BELOW ELEVATION 612'-9

	CHL			7-1-69	McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	PROPOSED COAL PREPARATION PILOT PLANT - PLAN -	E-4065-B 1

R
ICH
PATT
INSP
TOTAL

A B C D

1 17'-0 2 17'-0 3 19'-0 4

28'-9

℄ (P) 50'-0 Dia. Set. Cone

10'-0

2 G-B McNally Isman Triclones (Secondary)

Sampler

2 McPitt Henry Medium Cycloid

Sampler

(PA) #1

To Refuse Pond

10" Pipe

PLAN ABOVE ELEVA

G G H

1 17'-0 2 17'-0 3 19'-0 4

20'-0

℄ (P) 50'-0 Dia. Set. Cone

10'-0

5'-3

12'-6

9'-6

Secon. Fine Coal Sump & Pump

2-8'-6 Single Deck Ore Concent. Tables

Distributor (Rotary)

McPitt Crossflow Screen

(PA) 48"x10' R.O.M. Scraper Conv.

(PA) 7' Single Deck Deister Coal Washing Table

Distributor

(PA) 48"x14' Scraper Conv. (R.O.M. Coal) To Rotary Breaker

D.D. Magnetic Separators

Operators Panel

24"x4' Clean Coal Conv.

(PAM) Control Cab

7'-6

7'-6

10'-0

(P) Track ℄ #6

(PA) 36' Scraper Type Loading Boom

Control Room

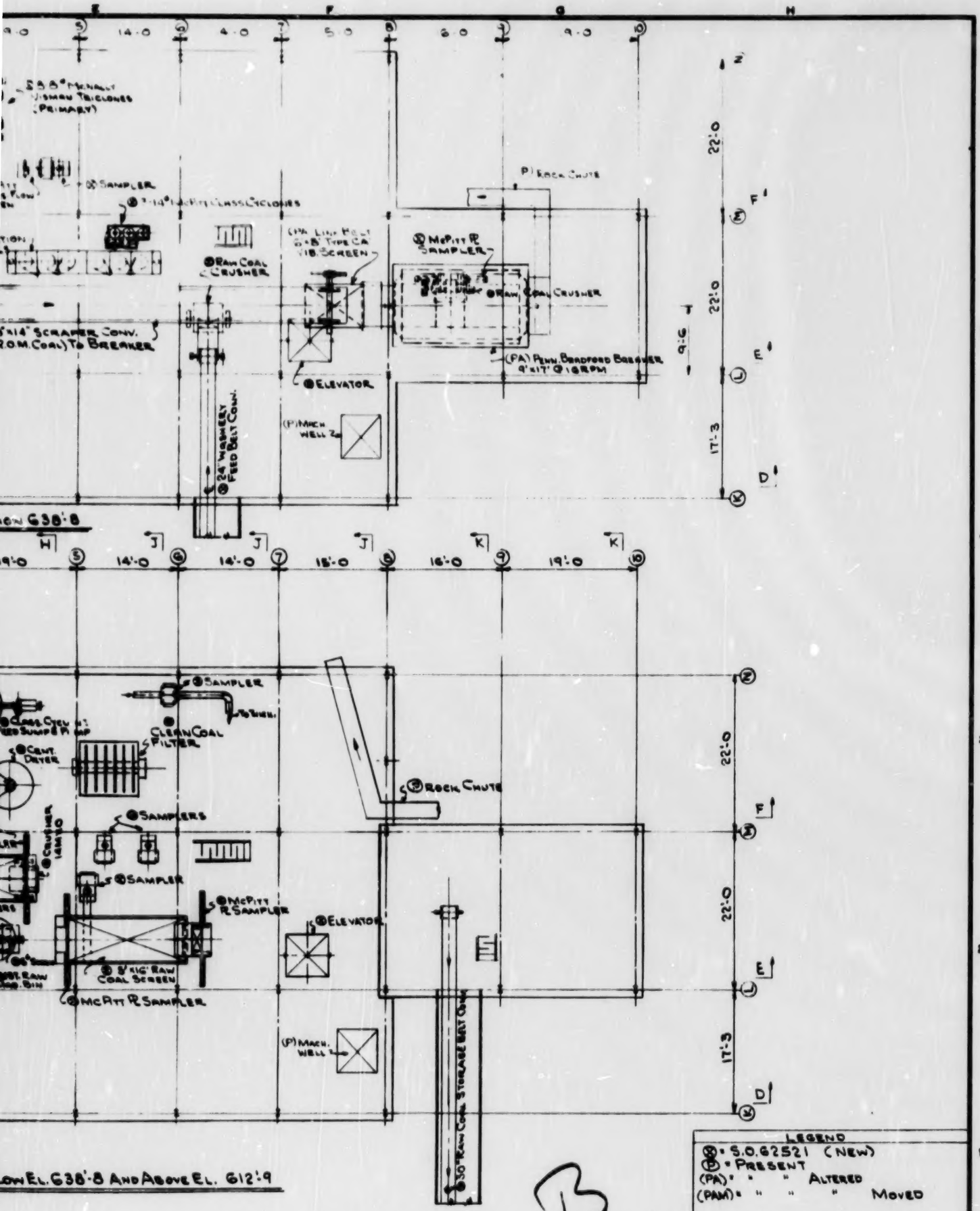
10'-0 20'-0

THIS AREA NOT TO BE USED FOR PILOT PLANT

PLAN B

18'-0 10'-6 17'-4½ 17'-4½

14 22 32



LOW EL. 638'-8 AND ABOVE EL. 612'-9

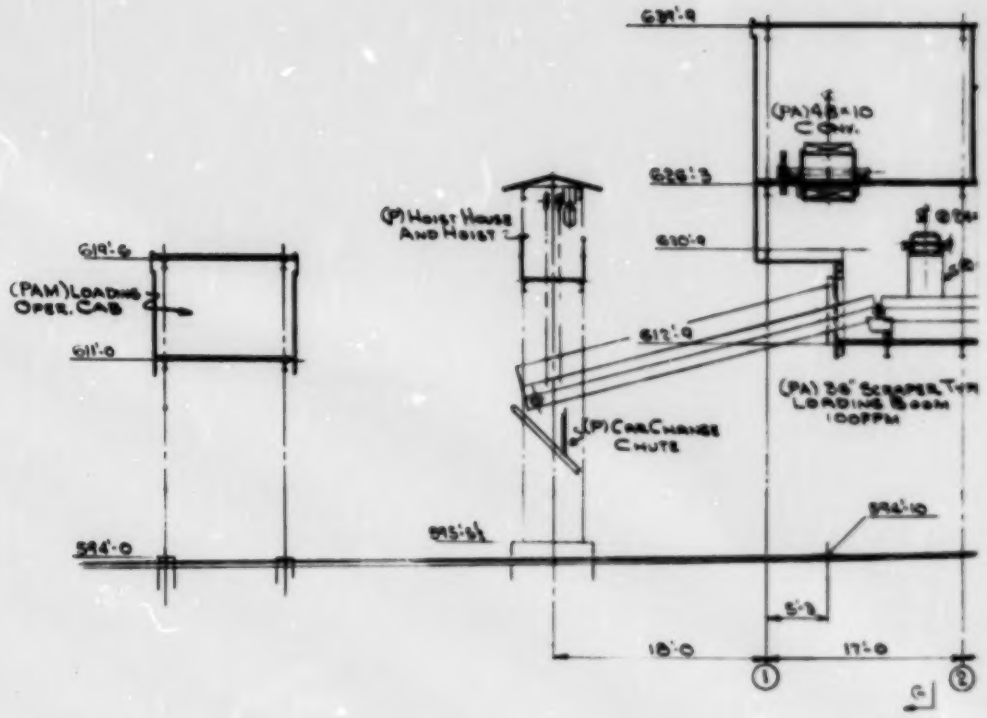
B

LEGEND
- ⊗ = S.O. 62521 (NEW)
- ⊗ = PRESENT
- (PA) = " " ALTERED
- (PAM) = " " " MOVED

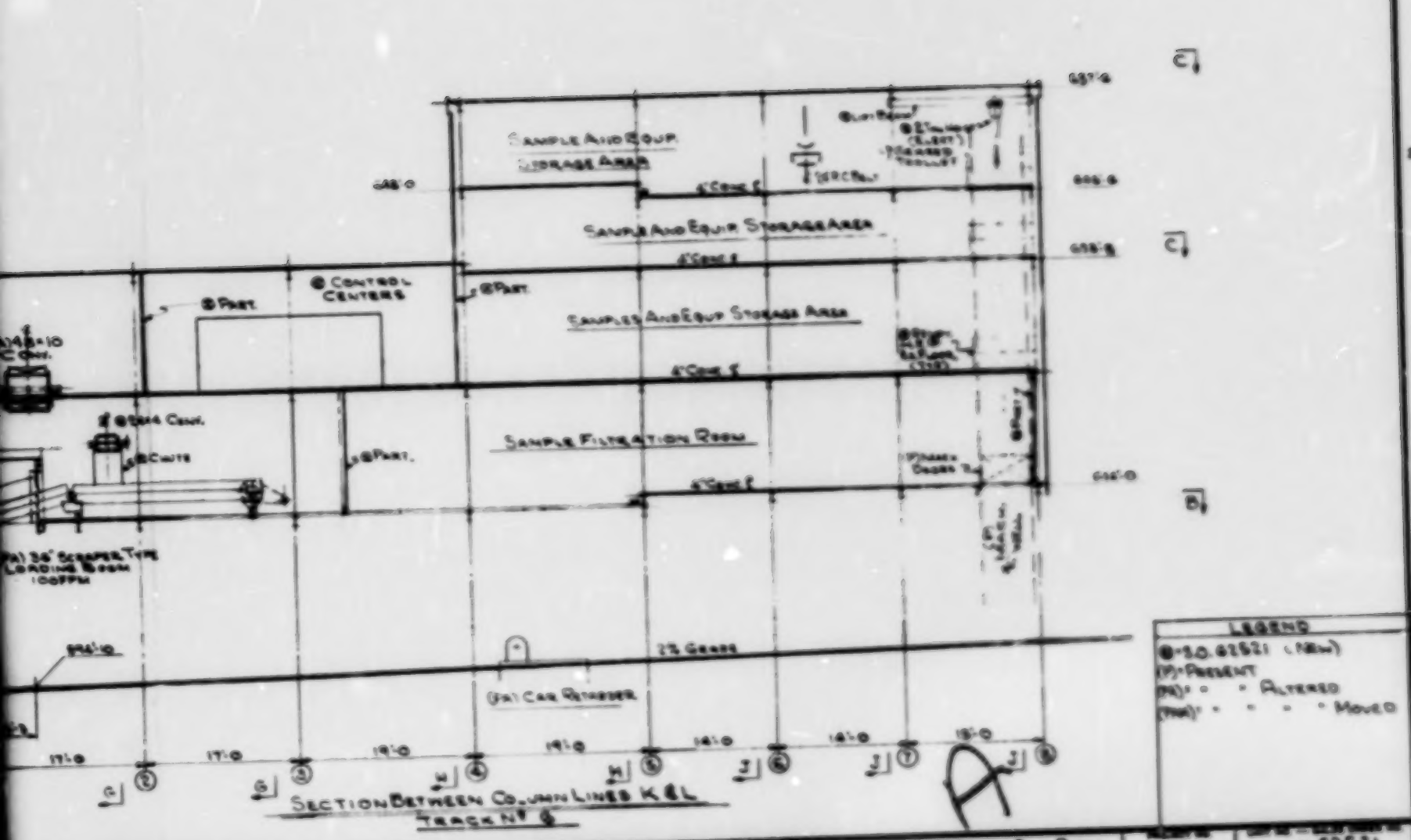
							McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	PROPOSED COAL PREPARATION PILOT PLANT — PLANS — FOR DEPARTMENT OF HEALTH, EDUCATION & WELFARE PROCTOR, CHIEF TEN MINE - TERRE HAUTE, INDIANA	PROJECT NO. — UNIT NO. — 62521 (SO NO.) DRAWING NO. E-4065-C 1
	C.H.L.				7-1969				

THIS DRAWING IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK — ALL RIGHTS OF DESIGN OR INVENTION RESERVED

A B C D

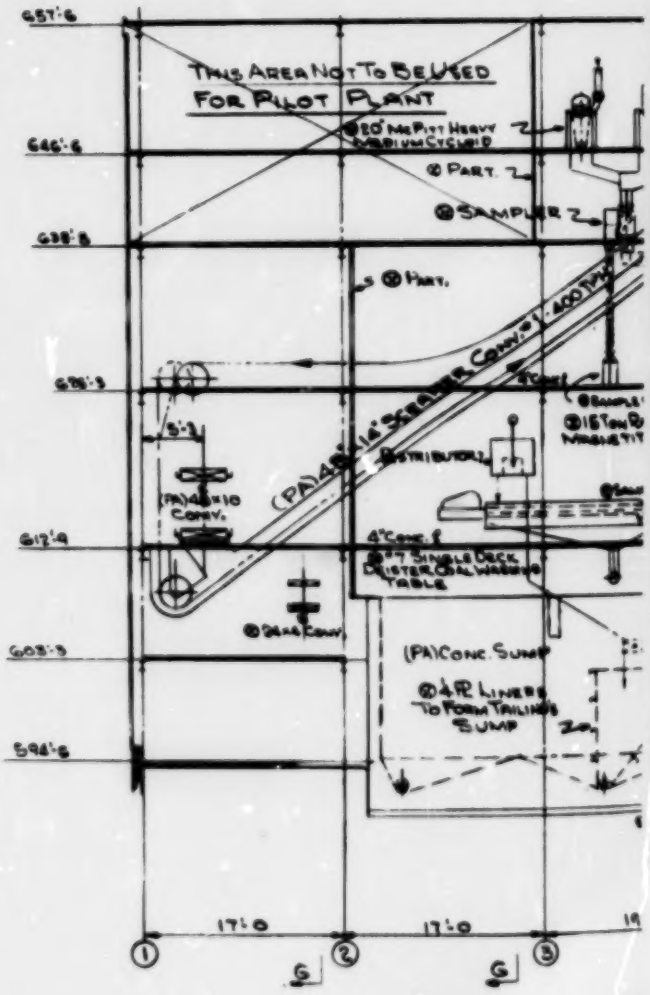

639'-9
(PA) 48"x10' CONV.
629'-3
(P) HOIST HOUSE AND HOIST
620'-9
619'-6
(PAM) LOADING OPER. CAB
611'-0
612'-9
(PA) 36" SCRAPER TYP LOADING BOOM 100FPM
(P) CAR CHANGE CHUTE
594'-0
595'-6½
594'-10
5'-3
18'-0
17'-0
1
2

A



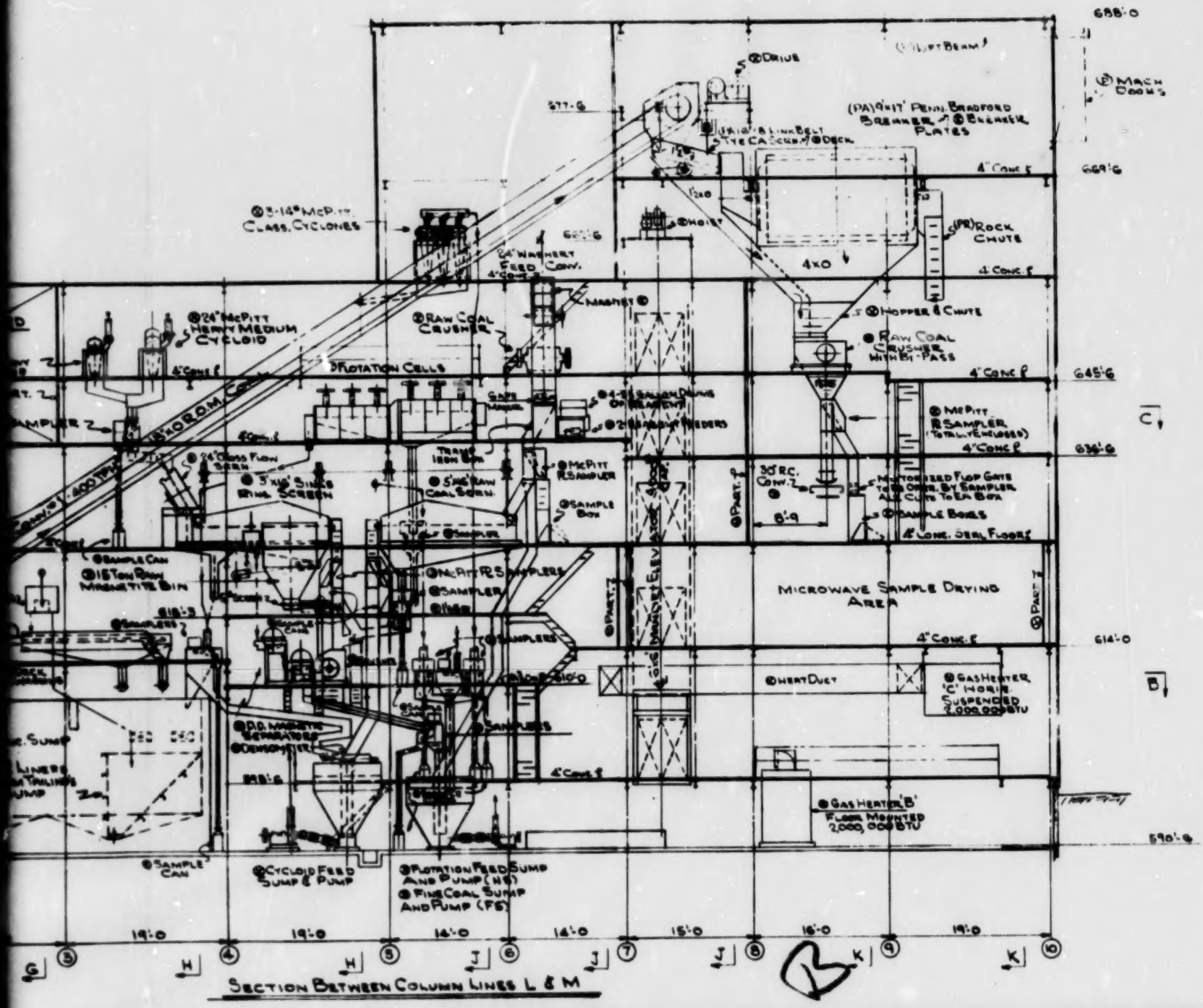
SECTION BETWEEN COLUMN LINES K & L
TRACK N° 6

					McNALLY PITTSBURG MFG. CORP.	PREPARATION PLANT PLANT	
							E-4065-D


THIS AREA NOT TO BE USED FOR PILOT PLANT
(PA) 48"ø SCREENS CONVEY. 400 TPH
(PA) 48"x10' CONVY.
(PA) CONC. SUMP
17'-0
17'-0

E F G H

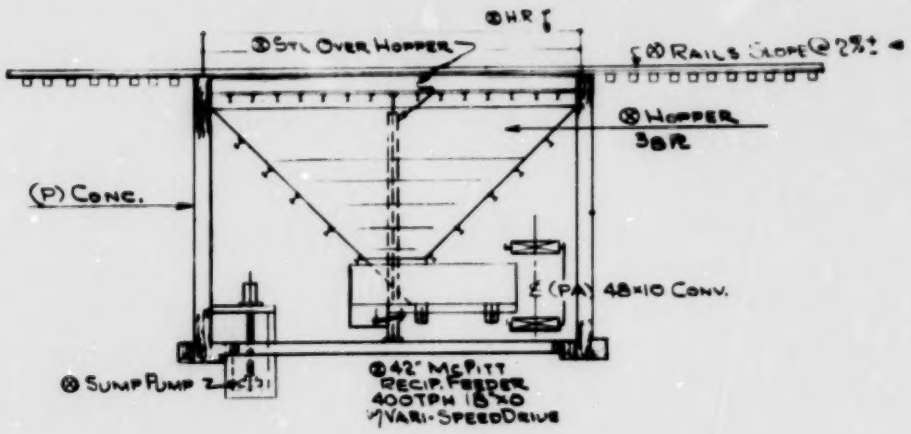
C



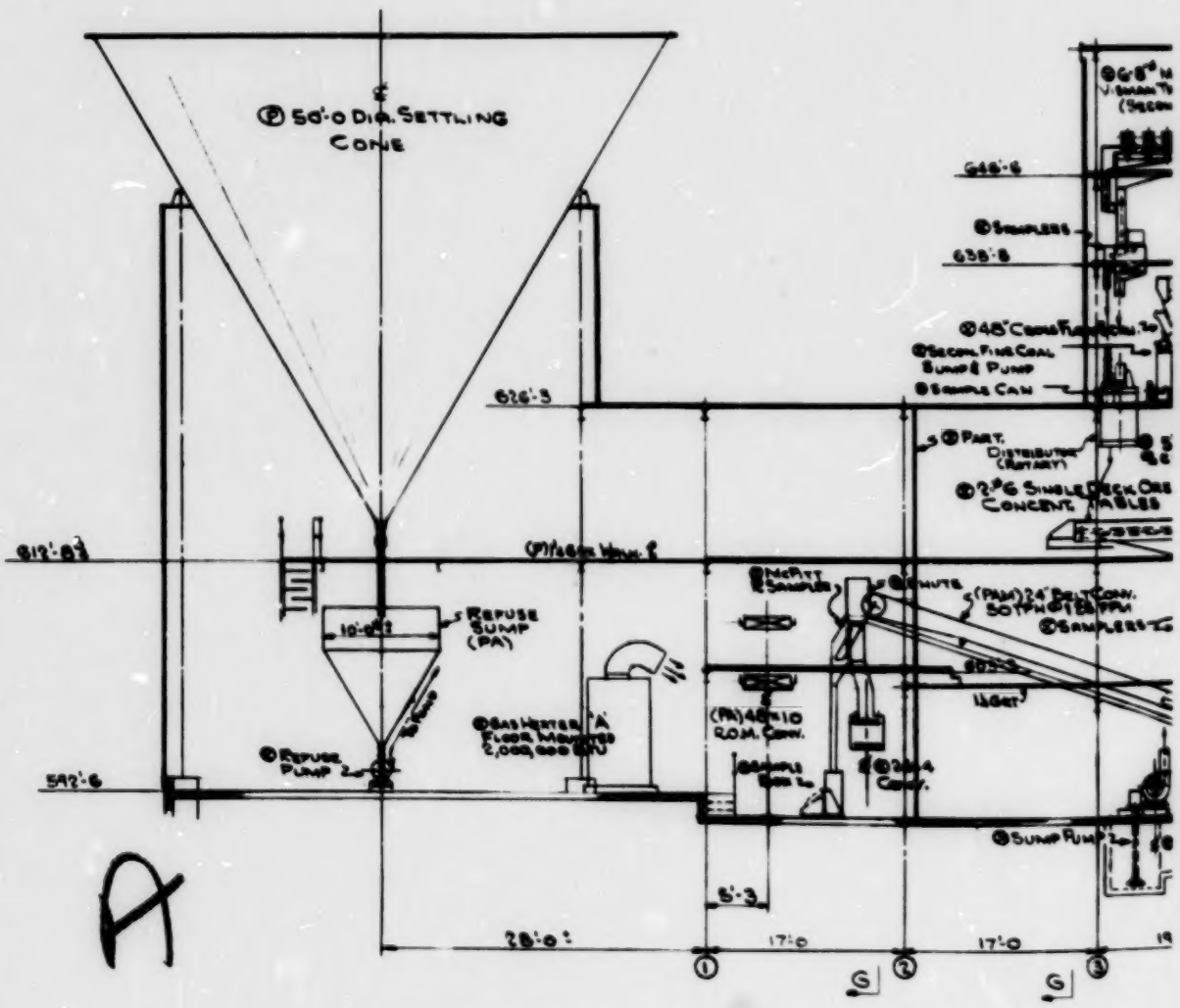
SECTION BETWEEN COLUMN LINES L & M

					McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	PROPOSED COAL PREPARATION PILOT PLANT	PROJECT NO.
	CHL			7-11-64	THIS DRAWING IS OUR PROPERTY AND MUST NOT BE USED DIRECTLY OR INDIRECTLY IN CONNECTION WITH OUR WORK. — ALL RIGHTS OF DESIGN OR INVENTION RESERVED	FOR DEPARTMENT OF HEALTH EDUCATION & WELFARE PEABODY COAL CO. TERRE HAUTE INDIANA	SCALE 1" = 1 FT. — DRAWING NO. E-4065-E

UNIV. NO. — SALES ORDER NO. — 62521 (SEND USE NUMBERS)



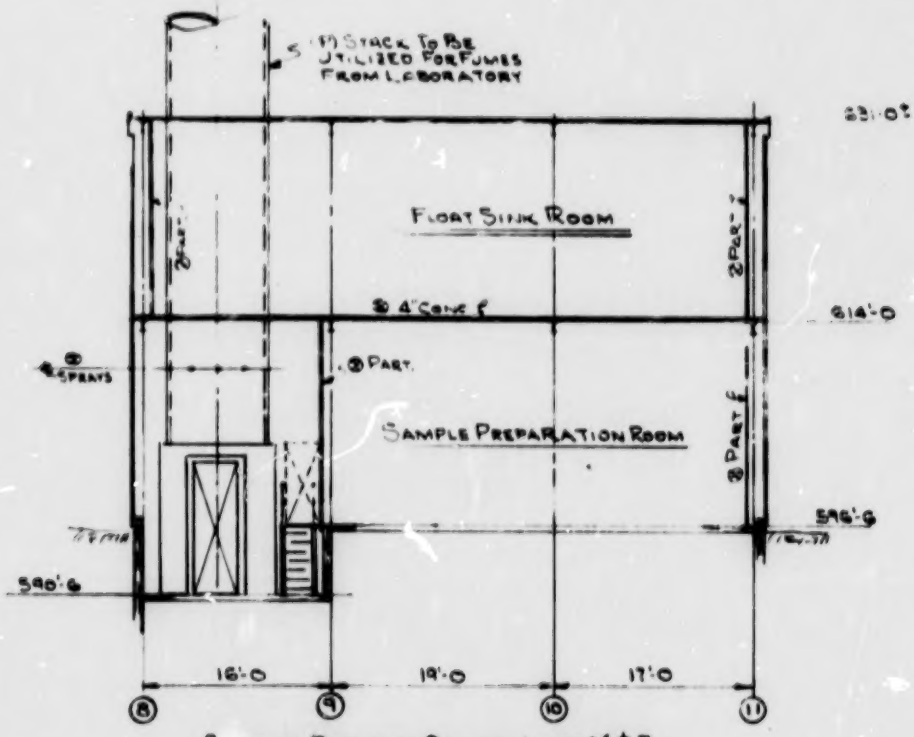
SECTION THRU (PA) R.O.M. REC. HOPPER



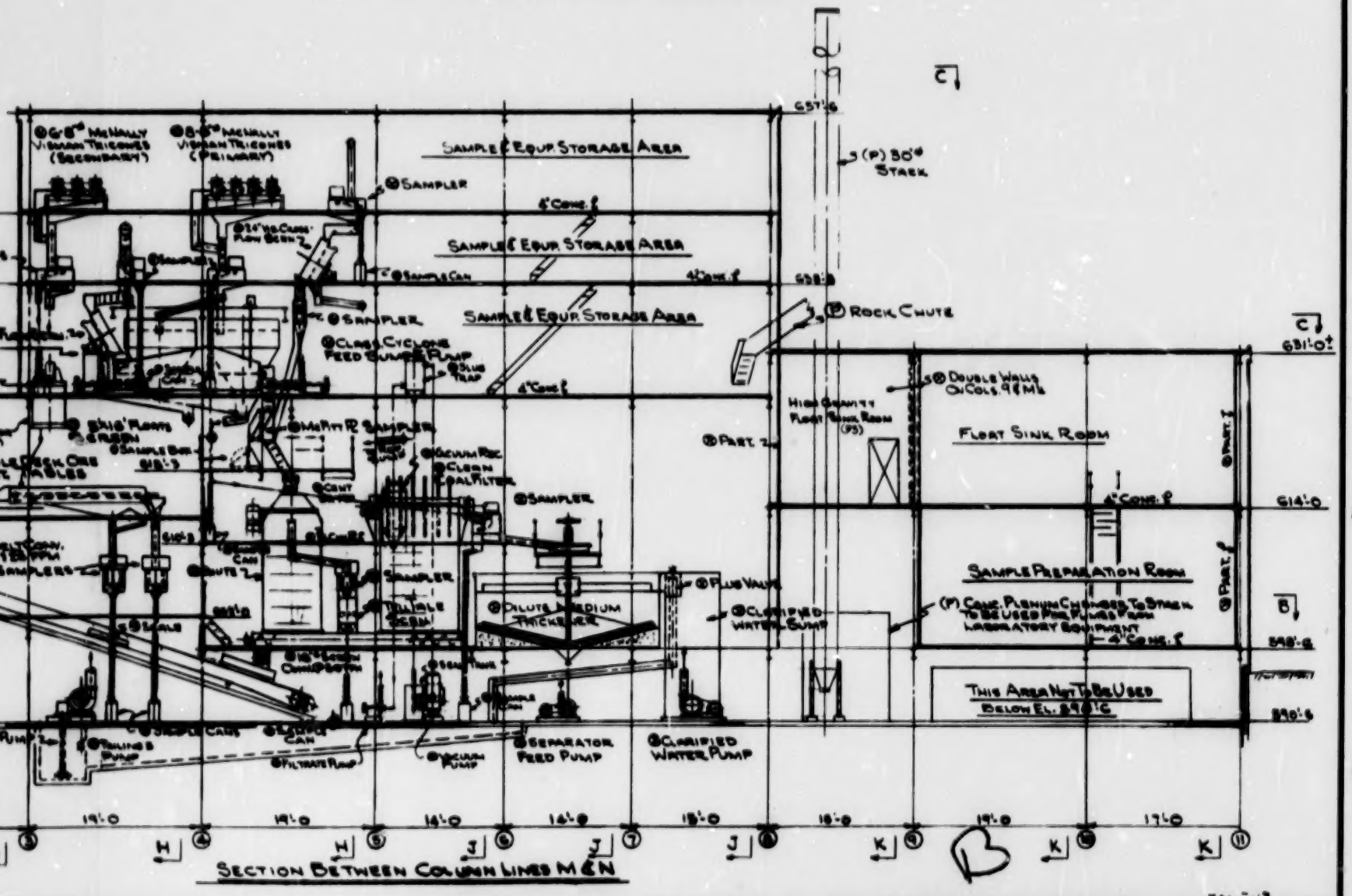
LEGEND

⊗ = S.O. 62521 (NEW)
(P) = PRESENT
(PA) = " " ALTERED
(PAM) = " " " & MOVED

A



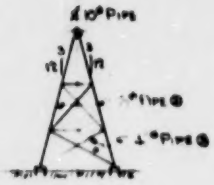
Section Between Column Lines Y & Z



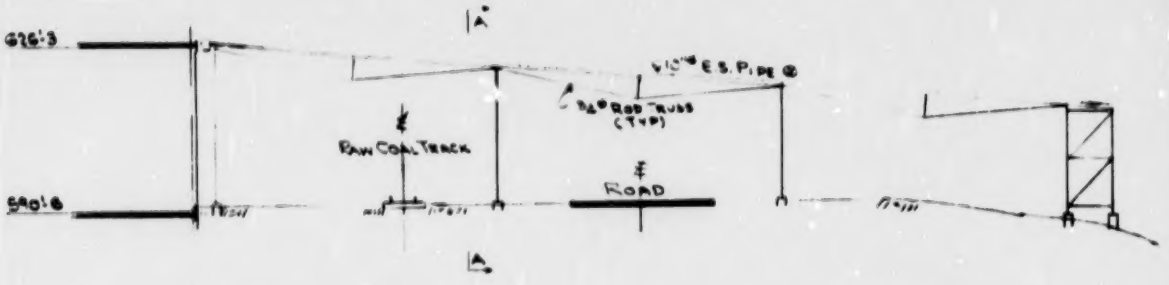
Section Between Column Lines M & N

	C.H.L.				7-12-62	McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	Proposed Coal Preparation Pilot Plant for Department of Health Education & Welfare Division of Coal Mine Health Investigation
							E-4068-F 1

A B C D

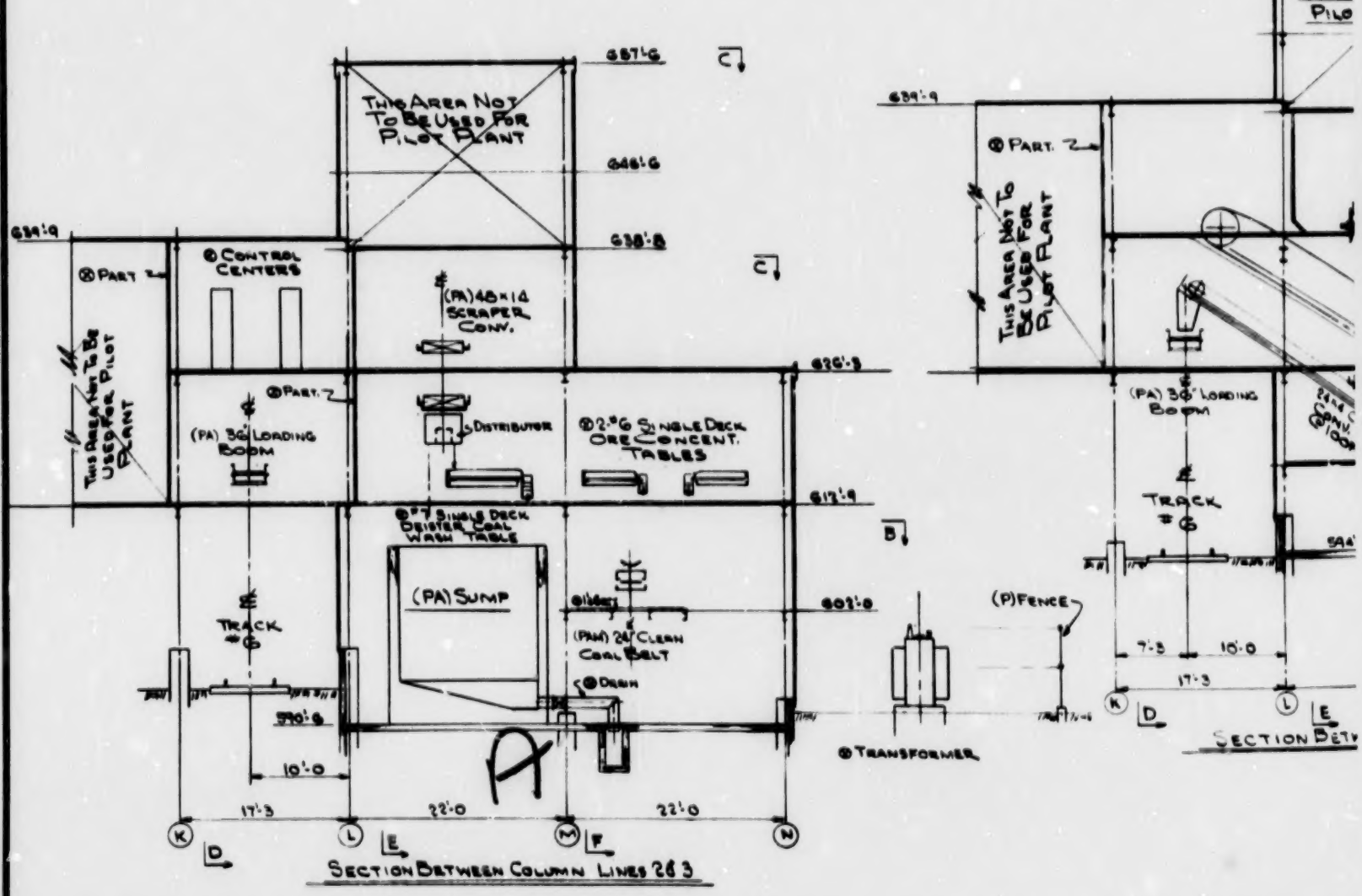


SECTION A-A
(TYP)



400'-0"

SECTION THRU ⊗ REFUSE
SCALE

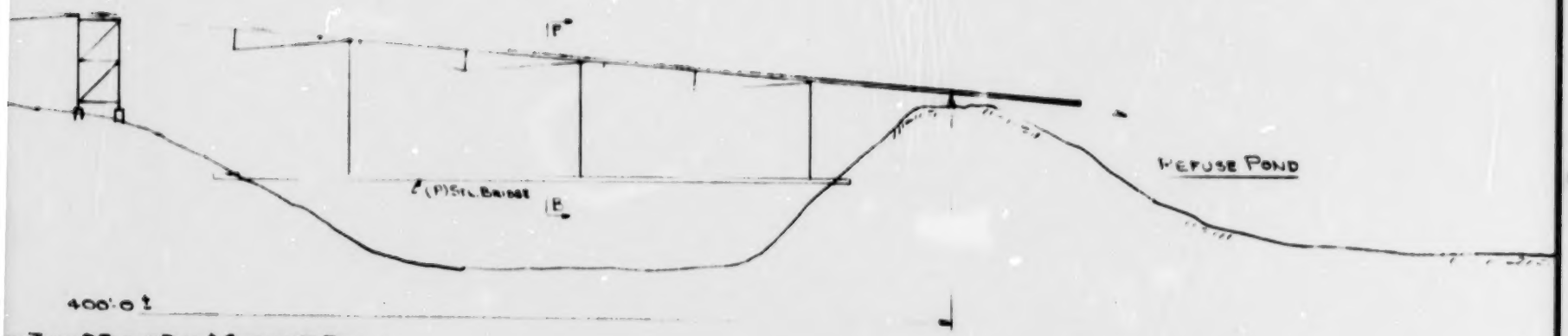


SECTION BETWEEN COLUMN LINES 26 3

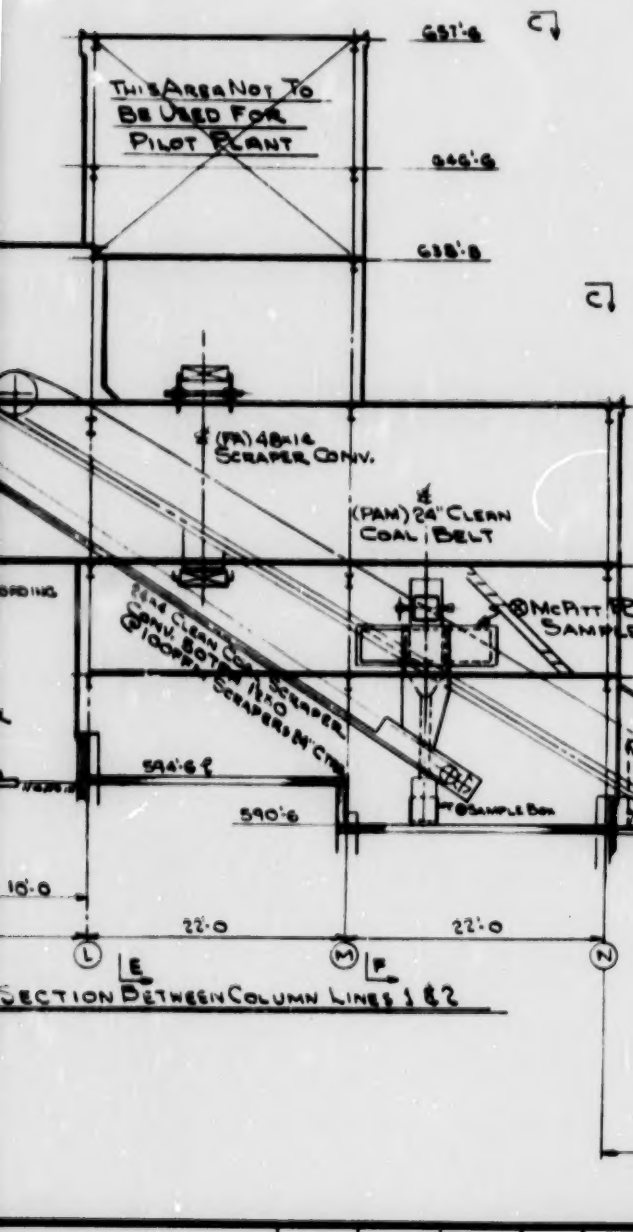
SECTION BET

THIS A
BE U
PILO

E F G H

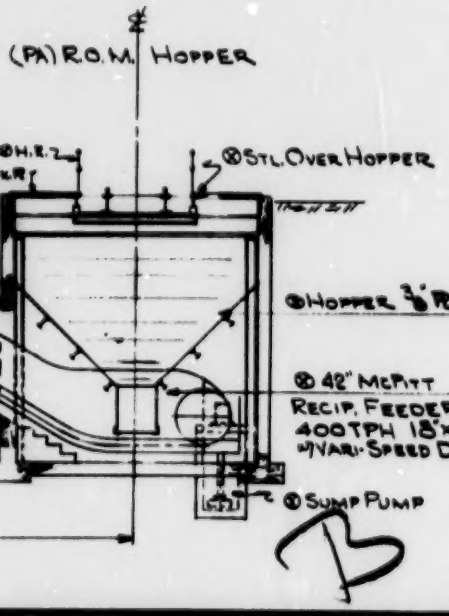


ON THRU ⊗ REFUSE PIPE & SUPPORTS TO POND
SCALE 1"=20'



SECTION BETWEEN COLUMN LINES 1 & 2

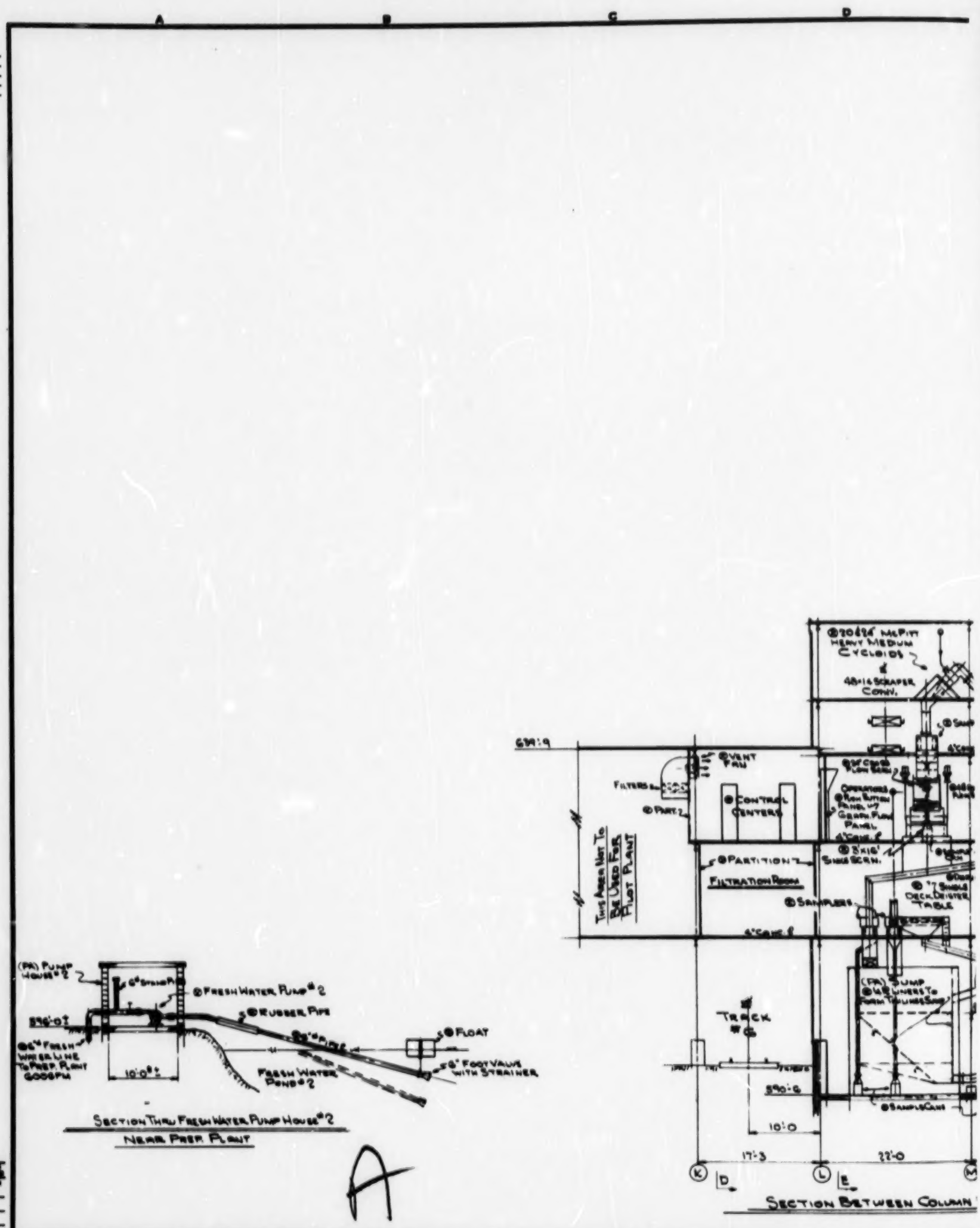
SECTION B-B
TYP. @ (P) BRIDGE

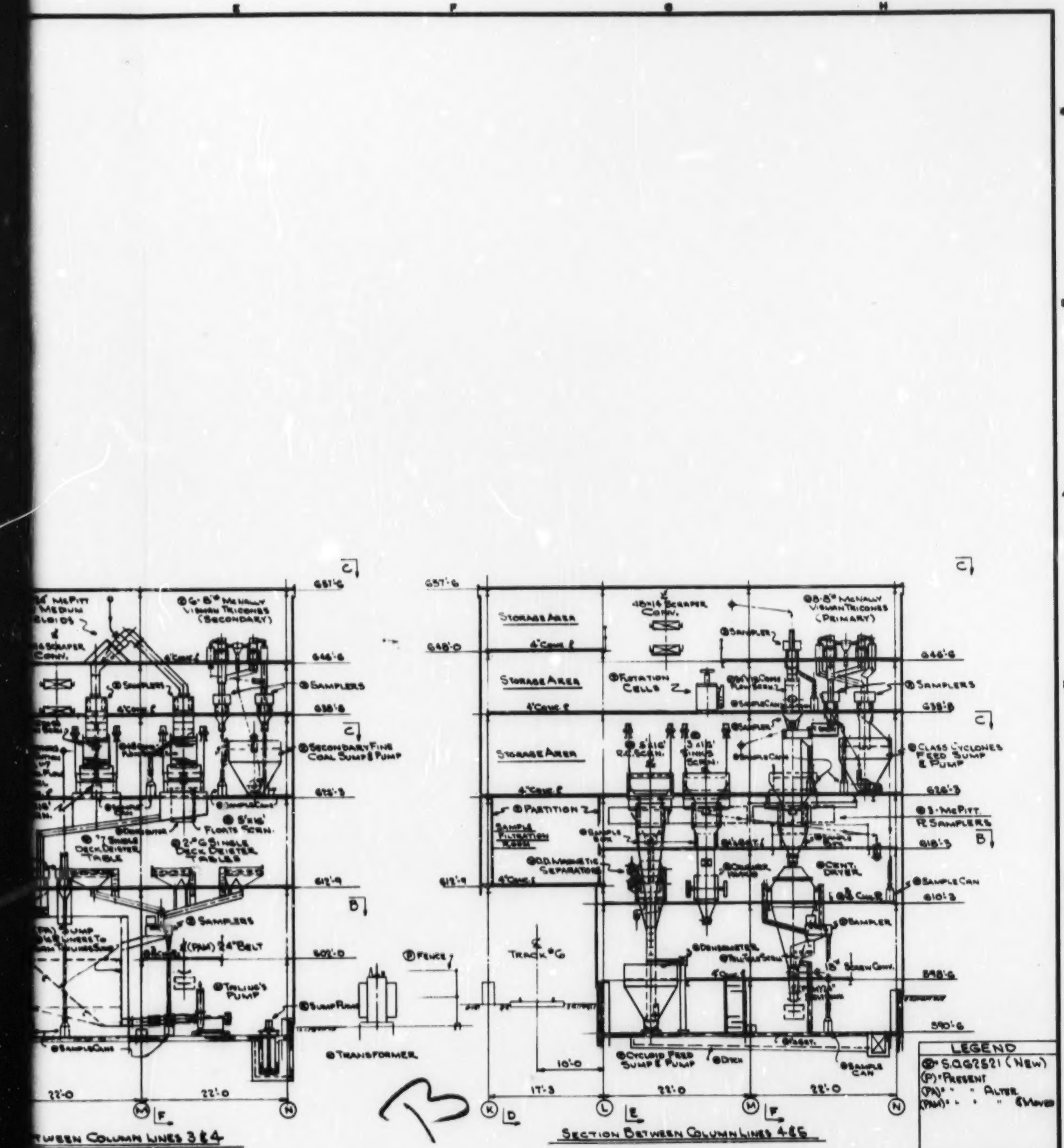


LEGEND
⊗ = S.O. 62521 (NEW)
(P) = PRESENT
(PA) = " " ALTER.
(PAM) = " " " & MOVED

	CHL			7-12-64	McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	Proposed Coal Preparation Pilot Plant	PROJECT NO.
					THIS DRAWING IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK — ALL RIGHTS OF DESIGN OR INVENTION RESERVED	Department Of Health Education & Welfare Public Health Service Cincinnati, Ohio Terre Haute, Indiana	SCALE 1" = 8'-0"

UNIT NO. — SALES ORDER NO. — 62521 (SHOP USE NUMBER)
DRAWING NO. E-4065-G
SHEET 1


A
B
C
D
(PA) PUMP HOUSE #2
6" SUCTION PIPE
FRESH WATER PUMP #2
RUBBER PIPE
FLOAT
596'-0"
6" FRESH WATER LINE TO PREP. PLANT GOOSEN
10'-0"
FRESH WATER POND #2
6" FOOT VALVE WITH STRAINER
SECTION THRU FRESH WATER PUMP HOUSE #2
NEAR PREP. PLANT
639'-9"
THIS AREA NOT TO BE USED FOR PILOT PLANT
VENT FAN
FILTERS
PART 2
CONTROL CENTERS
OPERATORS
GRAVITY FLOW PANEL
PARTITION 2
FILTRATION ROOM
SAMPLERS
TRACK
590'-6"
10'-0"
17'-3"
22'-0"
K
L
M
D
E
SECTION BETWEEN COLUMN



Section Between Column Lines 3 & 4

Section Between Column Lines 4 & 5

LEGEND

- ⊗ S.Q.G2521 (NEW)
- (P) = Present
- (PA) = " " Alter
- (PM) = " " " & Move

	CHL				7-12-69	McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	Proposed Coal Preparation Pilot Plant for Department of Health Education & Welfare Chauncey Chesterman - Terre Haute, Indiana

This drawing is our property and must not be used directly or indirectly with our work. All rights of design or invention reserved.

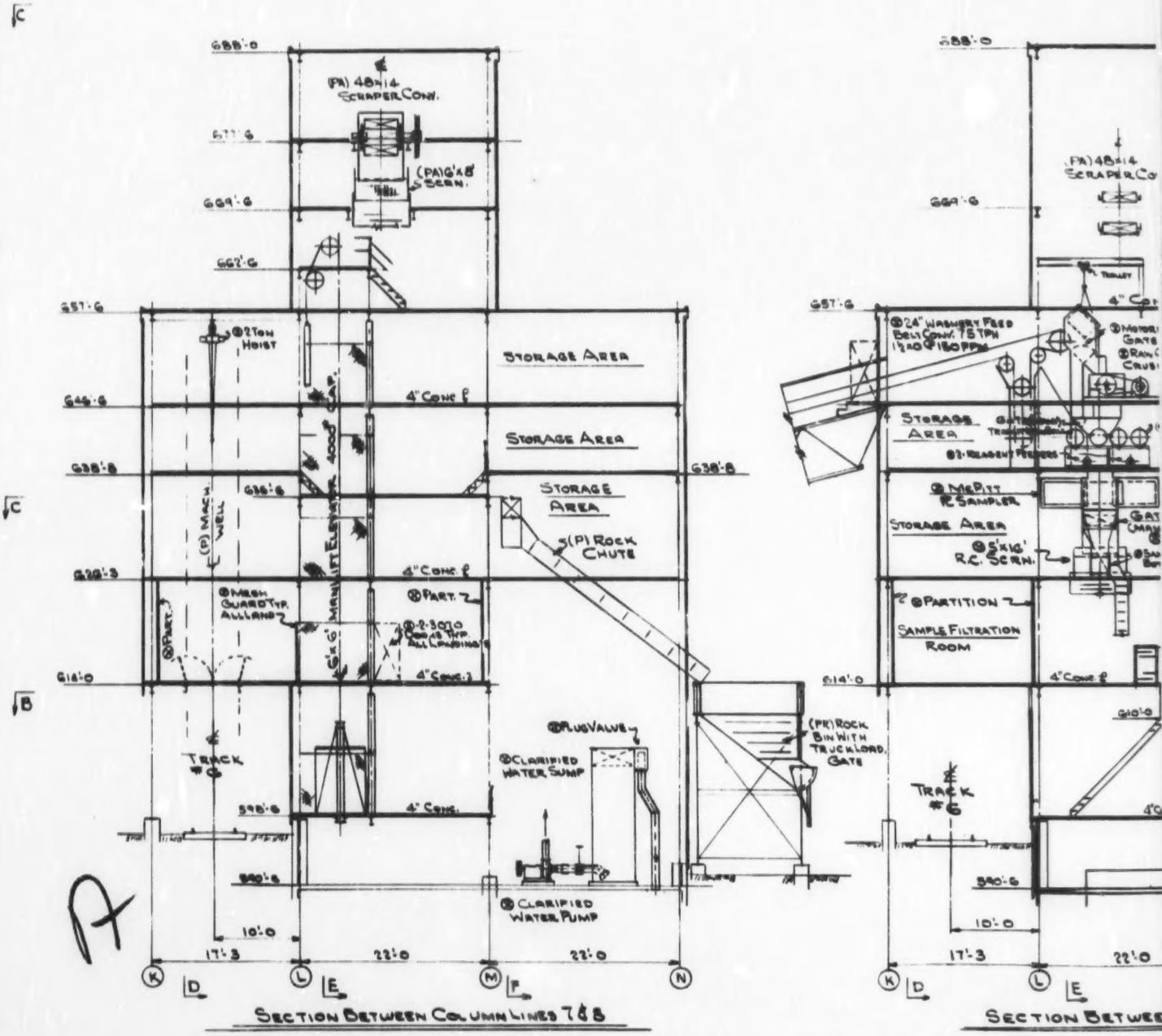
Previous No. —

Scale 1" = 1'-0"

Drawing No. E-4065-H

Sheet 1

Dwg. No. — 62521


A
B
C
D
688'-0
677'-6
669'-6
662'-6
657'-6
649'-6
638'-8
635'-6
629'-3
616'-0
598'-6
590'-6
(PA) 48"x14' SCRAPER CONV.
(PA) 6'x8' SCRN.
@ 2 TON HOIST
STORAGE AREA
4" CONC. ∅
STORAGE AREA
STORAGE AREA
(P) ROCK CHUTE
(P) MACH. WELL
5'x6' MAN LIFT ELEVATOR 4000 CAP.
@ MESH GUARD TYP. ALL LAND.
@ PART.
@ 2-30"ø DOORS TYP. ALL LANDING
4" CONC.
@ PART.
@ RUG VALVE
@ CLARIFIED WATER SUMP
@ CLARIFIED WATER PUMP
(PR) ROCK BIN WITH TRUCK LOAD. GATE
TRACK #6
10'-0
17'-3
22'-0
22'-0
K
L
M
N
D
E
F
SECTION BETWEEN COLUMN LINES 7 & 8
@ 24" WASHERY FEED BELT CONV. 75 TPH 1220 @ 150 FPM
@ McPITT R. SAMPLER
STORAGE AREA
@ 5'x16' R.C. SCRN.
@ PARTITION
SAMPLE FILTRATION ROOM
4" CONC. ∅
610'-0
590'-6
10'-0
17'-3
22'-0
SECTION BETWEE

E F G H

LEGEND

⊗ = S.O. 62521 (NEW)
Ⓟ = PRESENT
(PA) = " " ALT.
(PAM) = " " " & MOVED

(PA) 48×14 SCRAPER CONV.

4" CONC. f

3 MOTORIZED GATE
3 RAN COAL CRUSHER

STORAGE AREA

4" CONC. f

646'-6

(4) 550 GALLON DRUMS OF REAGENT ③

STORAGE AREA

4" CONC. f

638'-8

GATE (MANUAL)
③ SAMPLE CAN

STORAGE AREA

4" CONC. f

626'-3

618'-3

⊗ DILUTE MEDIUM THICKENER

610'-0

4" CONC. f

⊗ SEPARATOR FEED PUMP

22'-0 22'-0

E M F N

N BETWEEN COLUMN LINES G&7

688'-0

(PA) 48×14 SCRAPER CONV.

667'-6

⊗ 3-14" McPITT CLASS CYCLONES

667'-6

STORAGE AREA

STORAGE AREA

4" CONC. f

646'-6

STORAGE AREA

⊗ FLOTATION CELLS

STORAGE AREA

4" CONC. f

638'-8

STORAGE AREA

⊗ 5'-4" RAN COAL SCRN.

STORAGE AREA

⊗ SAMPLER

⊗ SLUG TRAP

4" CONC. f

626'-3

⊗ PARTITION 2

SAMPLE FILTRATION ROOM

618'-3

⊗ SAMPLER

⊗ CLEAN COAL FILTER

⊗ VACUUM REC.

⊗ SAMPLER

614'-0

⊗ SAMPLER

⊗ FLOTATION FEED SAMPLER

610'-0

⊗ SAMPLERS

⊗ SAMPLERS

TRACK #6

⊗ SAMPLE CAN

⊗ 18" SCREW CONV.

598'-6

⊗ SAMPLE CAN

⊗ FLOTATION FEED SUMP & PUMP

⊗ FINE COAL SUMP & PUMP

⊗ VACUUM PUMP

⊗ FILTRATE PUMP

⊗ SEAL TANK

10'-0

17'-3 22'-0 22'-0

K D L E M F N

SECTION BETWEEN COLUMN LINES 5&6

		CHL				7-12-68

McNALLY PITTSBURG MFG. CORP.
PITTSBURG KANSAS

THIS DRAWING IS OUR PROPERTY AND MAY NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK — ALL RIGHTS OF DESIGN OR INVENTION RESERVED

PROPOSED COAL PREPARATION PILOT PLANT

FOR DEPARTMENT OF HEALTH EDUCATION & WELFARE
PROJECT CONSULTANTS MINE TESTING HOUSTON TEXAS

PROJECT NO.

SCALE 1" = 1 FT.

DRW. NO. — BLDG. CONST. NO. — 62621 (SHD WAS NUMBER)

DRAWING NO. E-4065-J

SHEET 1

X-TEMP

A B C D

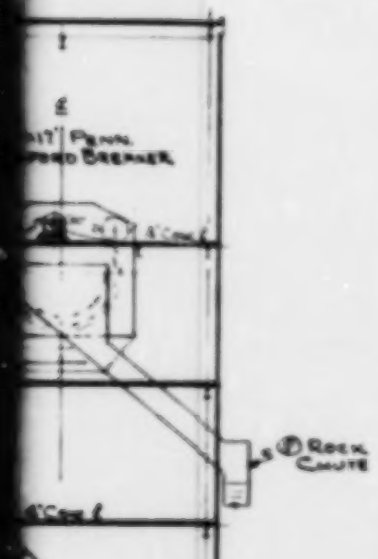
C

(PA) 9'x17' PENN. BRADFORD BREAKER

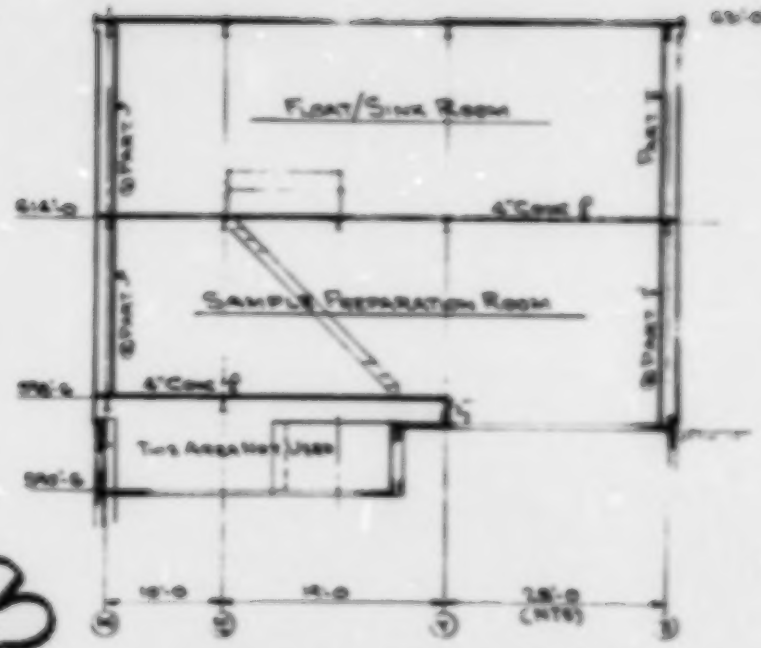
4"Conc.

4"Conc.

4"Conc.

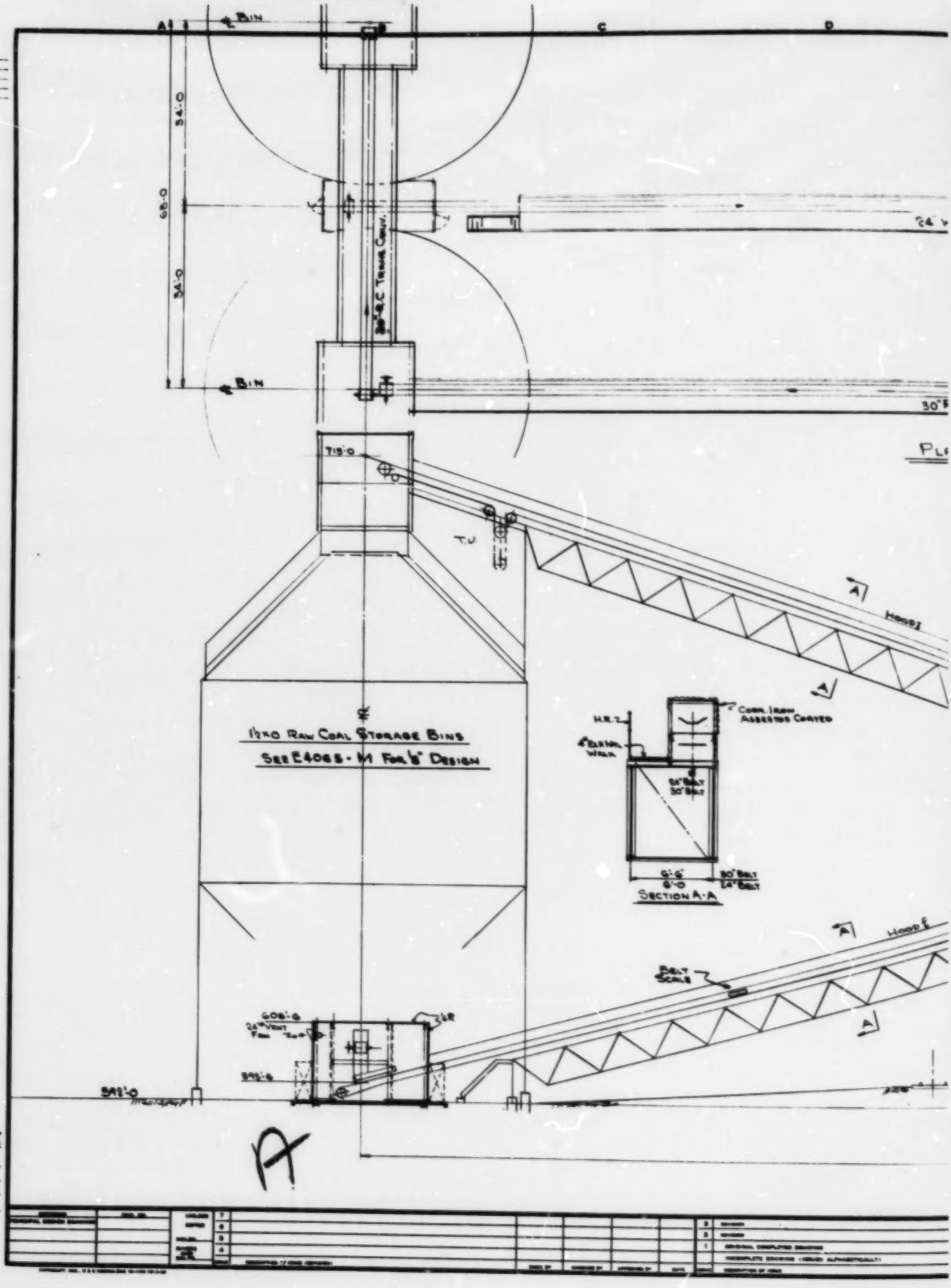


SECTION BETWEEN COLUMN LINES 9 & 10



SECTION BETWEEN COLUMN LINES 10 & 11

					McNALLY PITTSBURG MFG. CORP.	PROPOSED COAL PREPARATION PILOT PLANT	E-4066-K


A1
BIN
C
D
84'-0
68'-0
34'-0
24" V
BIN
30"
T.15'-0
T.O
T.U
HOOD
1½×0 RAW COAL STORAGE BINS
SEE E4068-M FOR ½" DESIGN
H.R.T.
4" CONC. WALL
CONC. RAW ASBESTOS COATED
84" BELT
30" BELT
6'-6"
6'-0
30" BELT
24" BELT
SECTION A-A
BELT SCALE
606'-6
24" VENT
FAN
3 E.R.
592'-0
A

24 WASHERY FEED CONV

30" RAW COAL STORAGE BELT

PLAN

30" RAW COAL STORAGE BELT CONV. 400 TPH 1240 400 FPM ⌐ 35° IDLERS

HOOD

12

48

BELT SCALE

HOOD

24" WASHERY FEED BELT CONV. 75 TPH (MAX) @ 150 FPM ⌐ 35° IDLERS

SEE E 4066 + 38K FOR 18" DESIGN OF PREP. PLANT

844'-6

836'-6

814'-0

TRACK "G"

211'-8

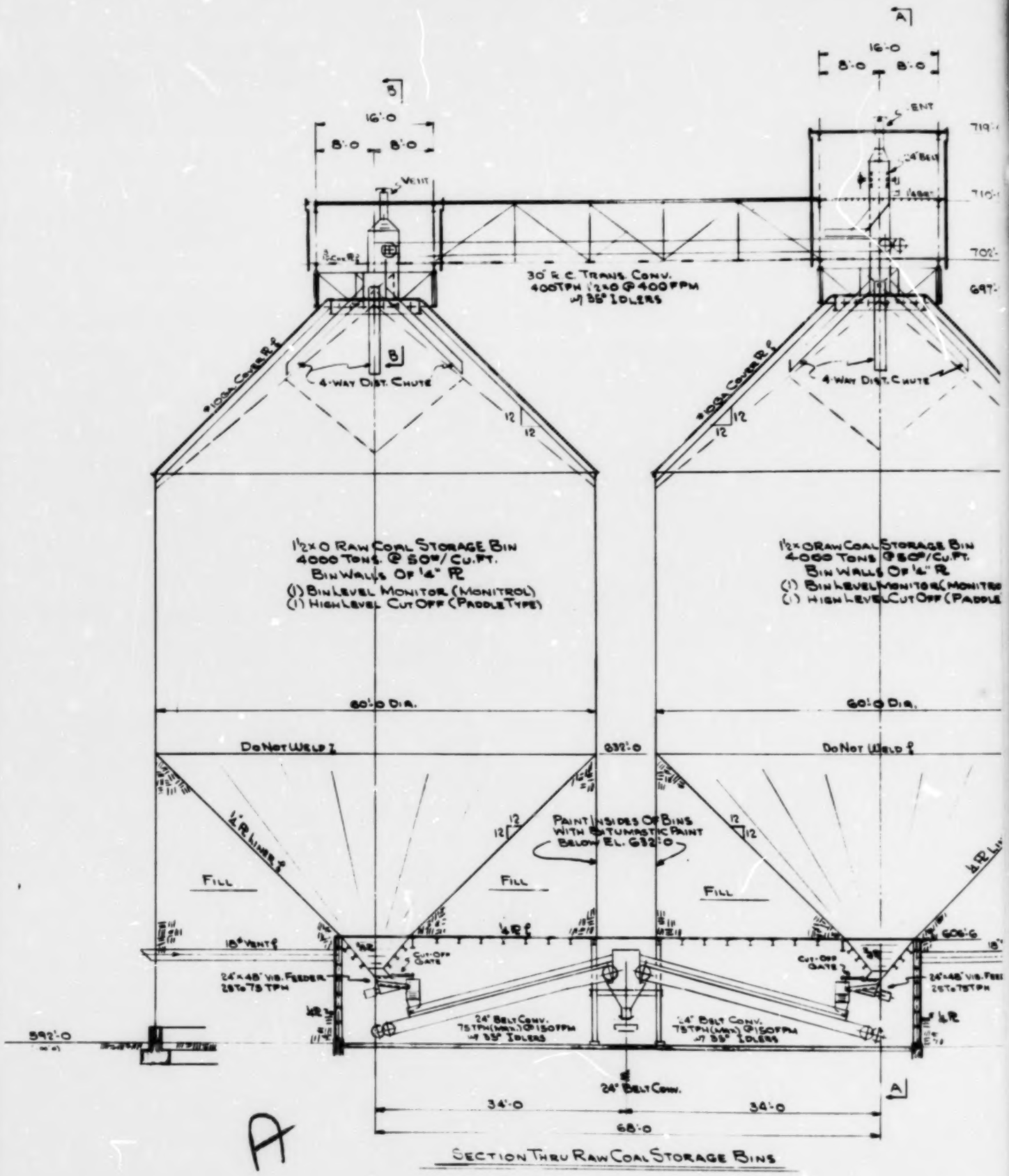
7'-3 10'-0 17'-3 22'-0

+NOTE+
ALL EQUIPMENT ON THIS DRAWING EXCEPT THE PREPARATION PLANT AND R.R. TRACKS TO BE NEW ON S.O. 62621 B

B

A

					McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	PROPOSED COAL PREPARATION PILOT PLANT	E-4065-L
						DESIGNED BY O'HEARN ENGINEERING & MFG. PARK RIDGE, ILLINOIS CHECKED MAIN TIPPLE HEADS INCLINE	


16'-0
8'-0
8'-0
30' R.C. TRANS. CONV.
400TPH 1240 @ 400FPM
w/ 35° IDLERS
4-WAY DIST. CHUTE
12
12
1½x0 RAW COAL STORAGE BIN
4000 TONS @ 50#/CU.FT.
BIN WALLS OF ¼" PL
(1) BIN LEVEL MONITOR (MONITROL)
(1) HIGH LEVEL CUT OFF (PADDLE TYPE)
60'-0 DIA.
DO NOT WELD
632'-0
PAINT INSIDES OF BINS
WITH BITUMASTIC PAINT
BELOW EL. 632'-0
FILL
18" VENT
24"x48" VIB. FEEDER
25 to 75 TPH
CUT-OFF GATE
24" BELT CONV.
75TPH(MAX.) @ 150FPM
w/ 35° IDLERS
592'-0
34'-0
68'-0
SECTION THRU RAW COAL STORAGE BINS

E F G H

719'-0
710'-0
705'-0
697'-2

15'-0
8'-0 8'-0
℄ 30" Belt
Vent
719'-0
710'-0
705'-0
SECTION B-B

GT3'-6"

...RAGE BIN
...CP/CU.FT.
...¼" PL
...ITOR(MONITR/RL)
...T OFF (PADDLE TYPE)

719'-0
715'-0
710'-0
705'-0
30" BELT
4 WAY DISTRIB CHUTE
4000 TON RAW COAL STORAGE BIN

30" Nat. Gas. Motor
Belt Conv. 400' Lg 1150
400 FPM w/ 35° Lagging
Head ℄
12
1½

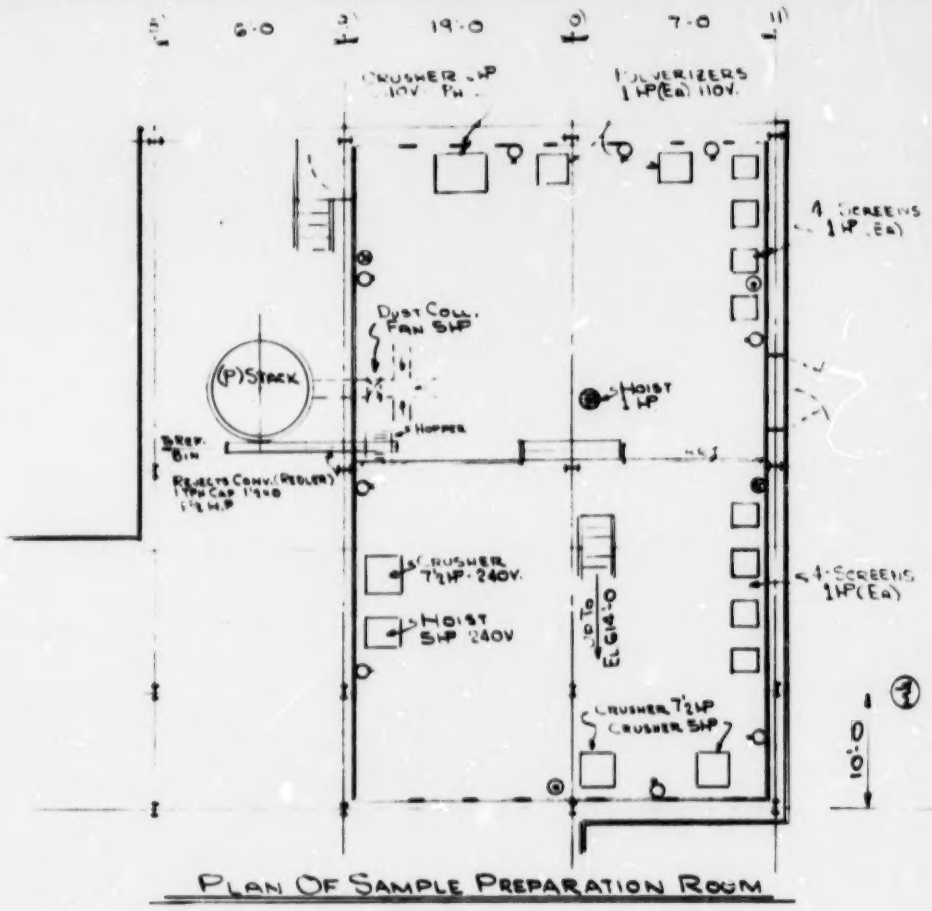
60'-0 DIA.
632'-0
12/12
12/12
¼" R. LINER
¼" R. LINER
FILL
FILL
FILL
605'-6
605'-6
10'-0
10'-0 VENT
24"x48" VIB. FEEDER
25 To 75 TPH
VIB FEEDER
¼" R
¼" R
594'-0
594'-0
592'-0 (GRADE)
24" BELT CONV.
228'-48 To ℄ COL. (L)
SECTION A-A

NOTE:
ALL EQUIPMENT ON THIS DRAWING TO BE NEW ON S.O. 62521 (B)

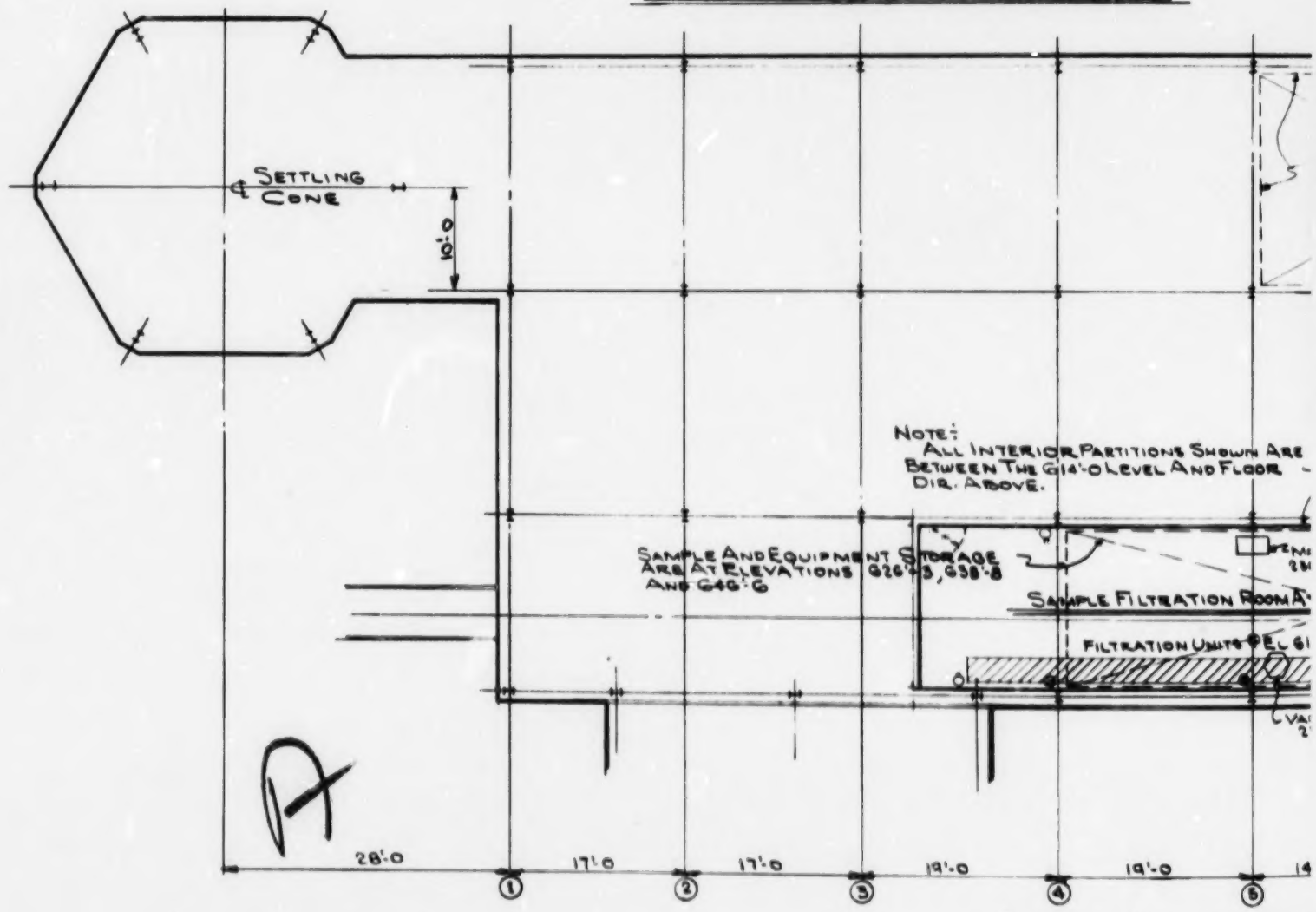
					McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	PROPOSED COAL PREPARATION PILOT PLANT	PROJECT NO.
	CHL			7-12-49	THIS DRAWING IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK — ALL RIGHTS OF DESIGN OR INVENTION RESERVED	DEPARTMENT OF HEALTH EDUCATION & WELFARE Location: Chestnut Main - Terre Haute Indiana	SCALE 1/8" = 1'-0"

UNIT NO. — SALES ORDER NO. — 62521 (SHD USE NUMBERS)
DRAWING NO. E-4065-M 1

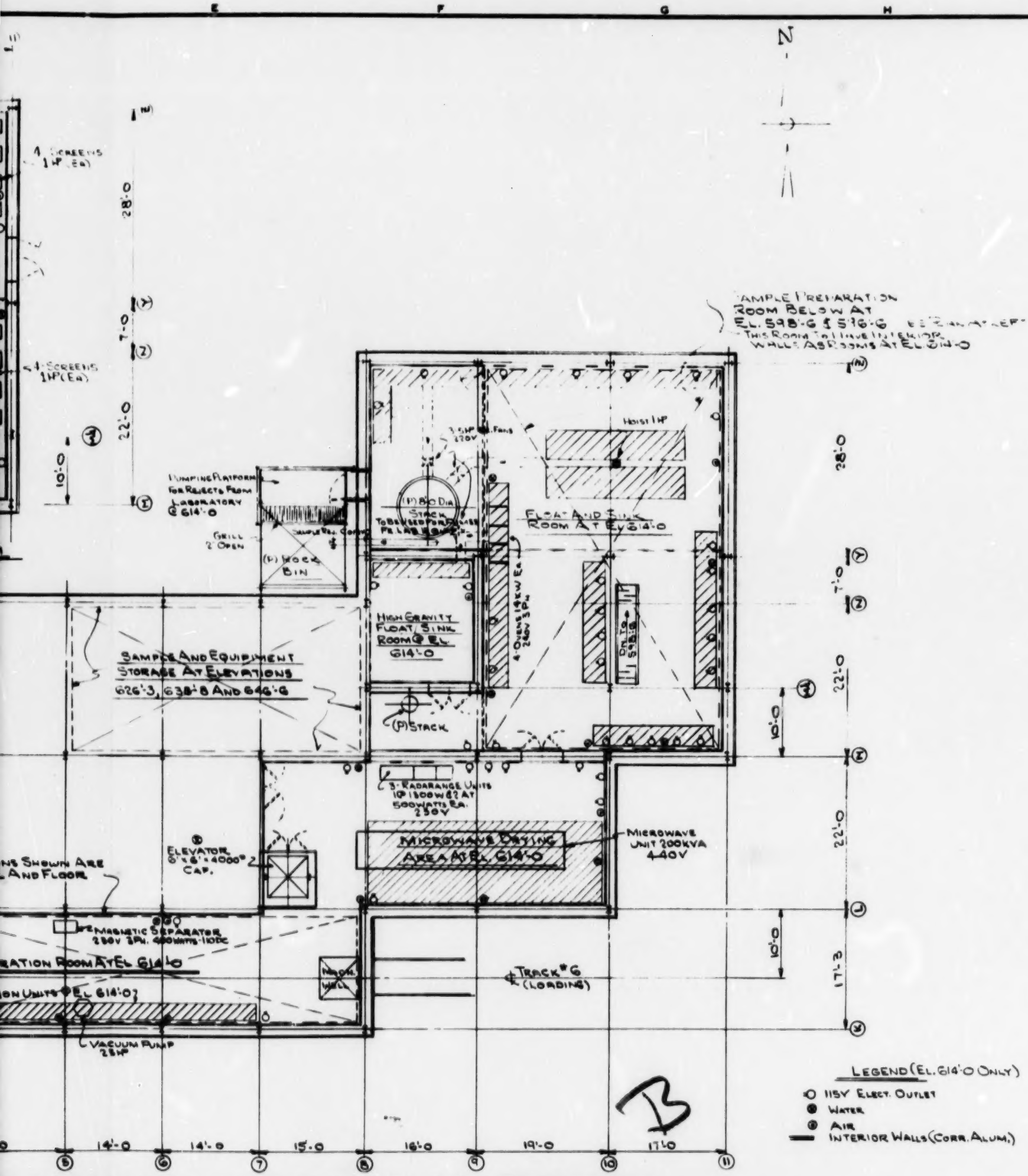
A B C D



PLAN OF SAMPLE PREPARATION ROOM



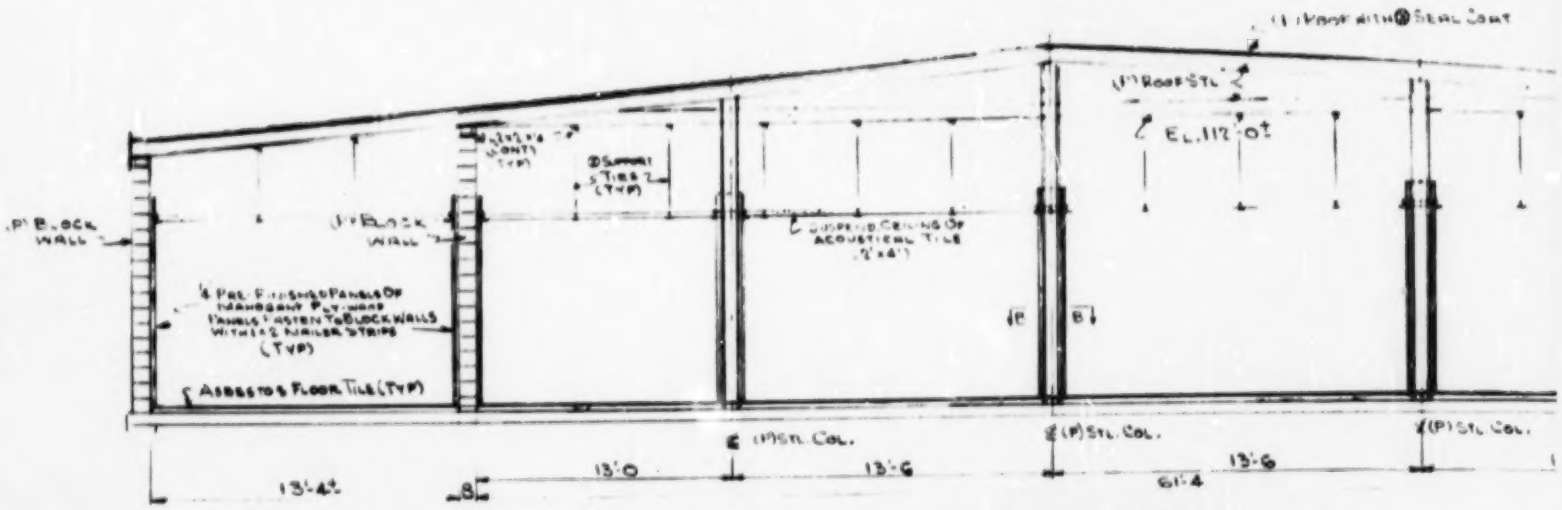
GENERAL PLAN OF LABOR



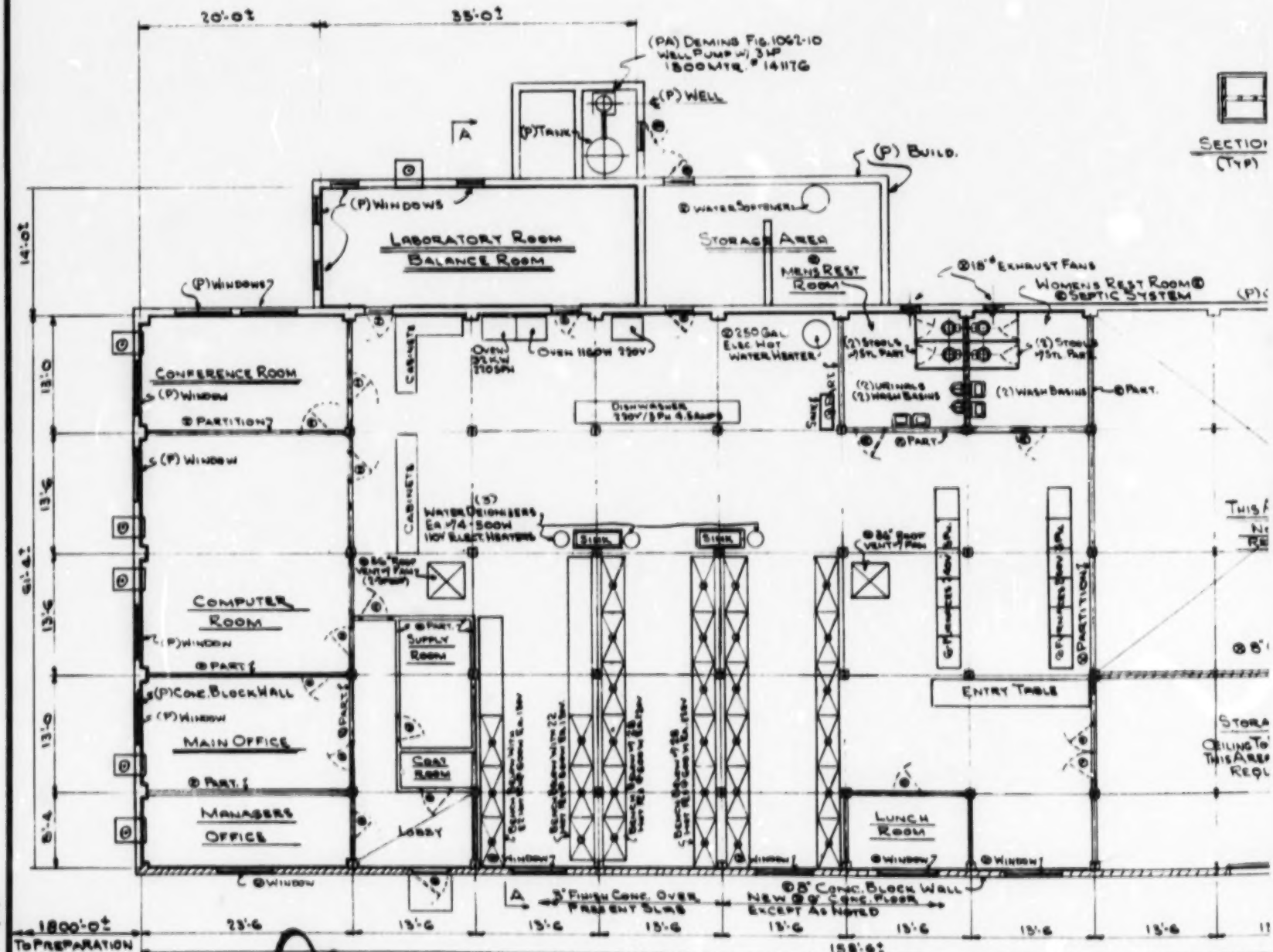
AN OF LABORATORY EQUIPMENT, STORAGE AND WORKING SPACE IN PREPARATION PLANT

					McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	PROPOSED COAL PREPARATION PLANT LABORATORY FOR DEPART. OF HEALTH EDUCATION & WELFARE PEABODY COAL CO. TWIN MINE - TERRE HAUTE - INDIANA	PROJECT NO.	UNIT NO. — SALES ORDER NO. — 62521 (SEND USE NUMBER)
	HL			7-12-69	THIS DRAWING IS OUR PROPERTY AND MUST NOT BE LOANED EXCEPT IN CONNECTION WITH OUR WORK — ALL RIGHTS OF DESIGN OR INVENTION RESERVED		SCALE 1" = 8'-1"	DRAWING NO. E-4065-N 1

A B C D

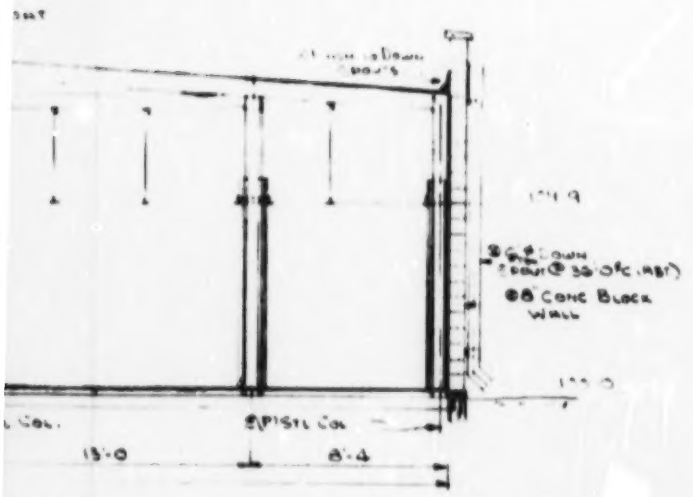


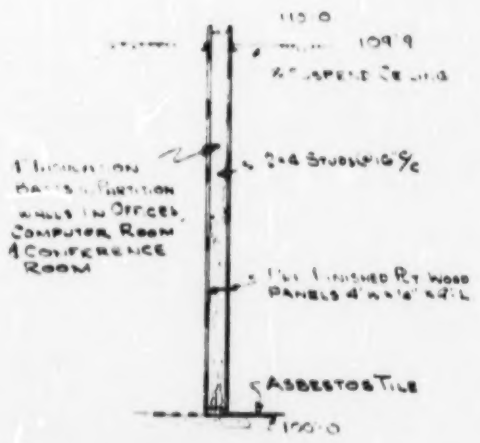
SECTION A-A



PLAN OF PRESENT TRUCK GARAGE REMODELED FOR PROPOSED PILOT PLANT LABORAT

SECTION (TYP)

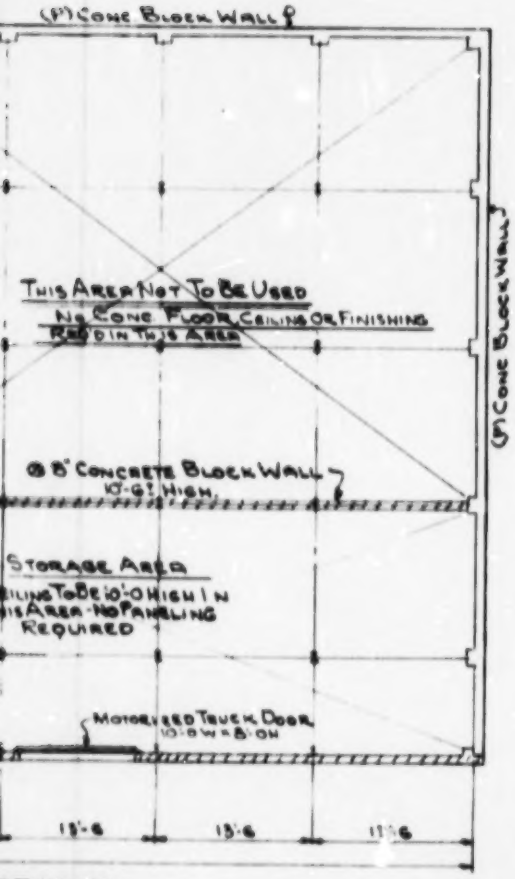


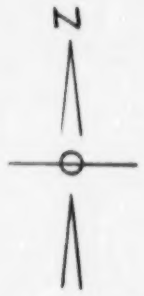


SECTION THRU INTERIOR PARTITIONS
(TYP)

STEEL COLUMNS ENCASED WITH 1" THK. WOOD PLANKS STAIN TO MATCH PANELING

SECTION B-B
(TYP)


(P) Conc Block Wall
(P) Conc Block Wall
This Area Not To Be Used
No Conc Floor, Ceiling or Finishing Req'd in This Area
8" Concrete Block Wall 10'-0" High
Storage Area
Motor Reed Truck Door 10'-0" x 8'-0"
13'-6
13'-6
11'-6



†Note†
1. Lighting To Be Recessed Floresscent
2. Drinking Water To Be Bottled
3. Electrical To Be 220/110 Volt

4. Laboratory And Rest Room Water To Be Supplied Where Req'd From Well
5. Plastic Grills To Be Installed In Suspended Ceiling For Ventilation By Roof Fan
6. Exterior Of Building To Be Painted

LEGEND
- ⊗ = S.O.G251 - (NEW)
- (P) = Present
- (PA) = Pres & Altered
- ① = New Window Type Air-Cond.
- ▨ = " 8" Conc Block Walls
- ● = New Stl. Doors
- ① = " Wood "
- ⊠ = Fume Hoods E.A. With 1/6HP Air Suppl. Blowers And 1/3 HP Exhaust Blowers (30 Total)

	CHL				7-12-69	McNALLY PITTSBURG MFG. CORP. PITTSBURG KANSAS	Proposed Coal Preparation Plant Laboratory & Office for Dept. Of Health Education & Welfare by Barry Chilton Mine - Terre Haute, Ind.

THIS DRAWING IS OUR PROPERTY AND MUST NOT BE LOANED EXCEPT IN CONNECTION WITH OUR WORK — ALL RIGHTS OF DESIGN OR INVENTION RESERVED

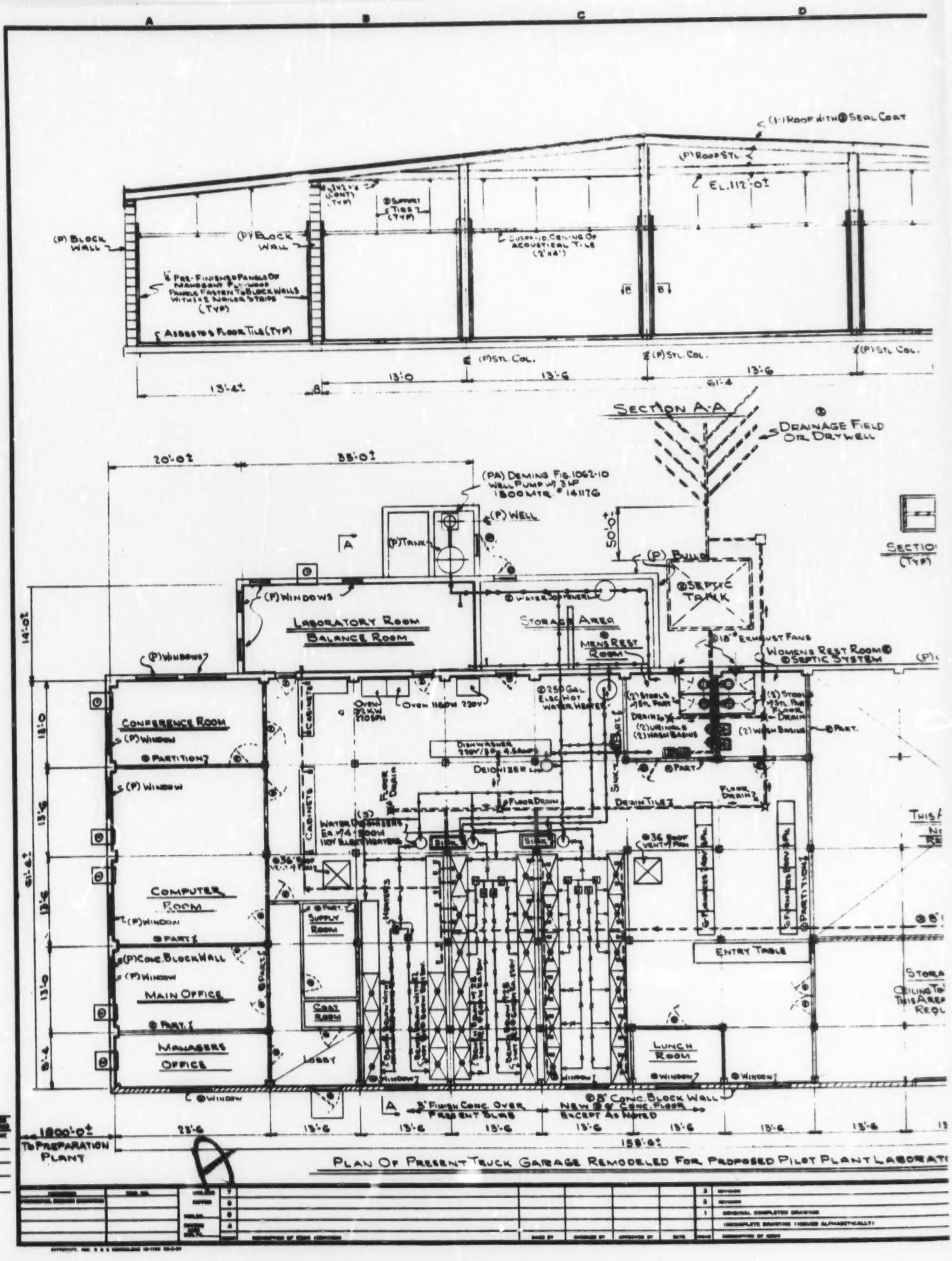
PROJECT NO.

UNIT NO. — SALES ORDER NO. — G2521 (SEND USE NUMBER)

SCALE: 1" = 1'-0"

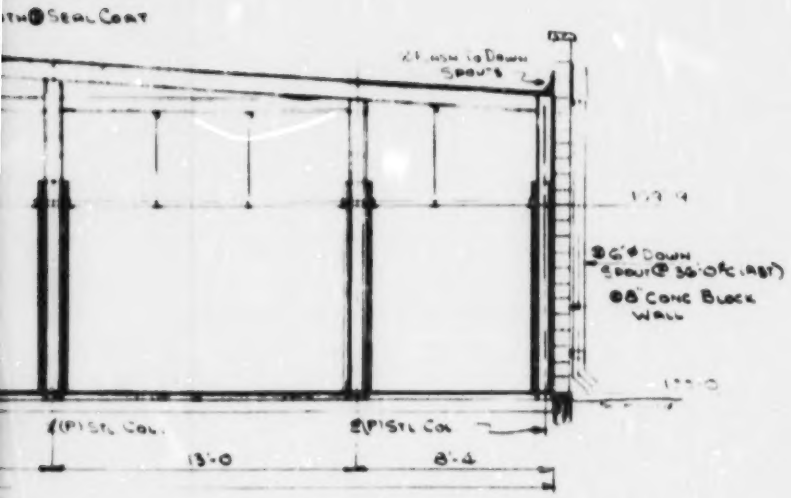
DRAWING NO. E-4065-P

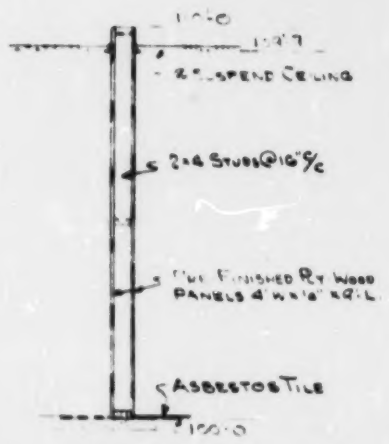
SHEET 1



PLAN OF PRESENT TRUCK GARAGE REMODELED FOR PROPOSED PILOT PLANT LABORATO

E F G H

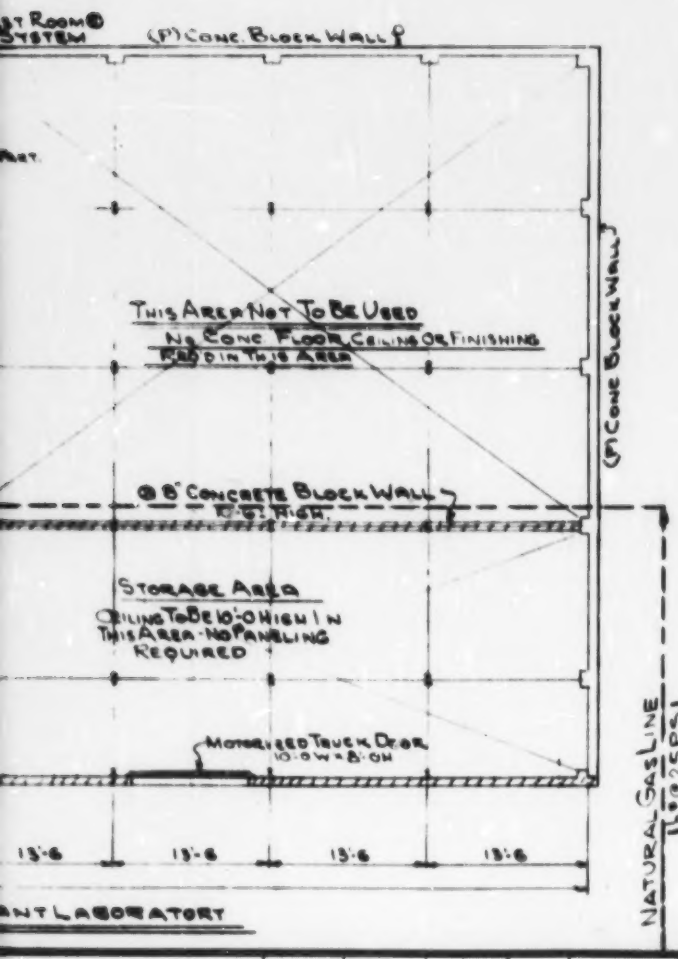




Section Thru Interior Partitions
(Typ)

GE Field
EY Well

Section B-B
(Typ)


Rest Room & System
(P) Conc. Block Wall
(P) Conc. Block Wall
This Area Not To Be Used
No Conc Floor, Ceiling or Finishing Req'd in This Area
8" Concrete Block Wall 8'-0" High
Storage Area
Ceiling To Be 10'-0 High in This Area - No Panelling Required
Motor Reed Truck Door 10'-0 W x 8'-0 H
13'-6
13'-6
13'-6
13'-6
Natural Gas Line 1½" @ 25 P.S.I.

ANT LABORATORY

N

Note:
1. Lighting To Be Recessed Floresecent
2. Drinking Water To Be Bottled
3. Electricals To Be 220/110 Volt
4. Laboratory And Rest Room Water To Be Supplied Where Req'd From Well
5. Plastic Grills To Be Installed In Suspended Ceiling For Ventilation By Roof Fan
6. Exterior Of Building To Be Painted

LEGEND
- ⊛ = S.O.G 251 - (New)
- (P) = Present
- (PA) = Pres & Altered
- ① = New Hudson Type Air-Cond.
- ▭ = " 8" Conc. Block Walls
- ● = New Stl. Doors
- ◐ = " Wood "
- ⊠ = Fume Hood Each With ½ HP Air Supply Blowers And ⅓ HP Exhaust Blowers (30 Total)
- Gas Lines — — — — —
- Water ——•——•——
- Deionized Water -x-x-x- (Plastic)
- Drain Tile & Septic System ———————

	CHL				3-12-69

McNALLY PITTSBURG MFG. CORP.
PITTSBURG KANSAS

THIS DRAWING IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK — ALL RIGHTS OF DESIGN OR INVENTION RESERVED

Proposed Coal Preparation Plant
Laboratory & Office (Piping)
For Dept. Of Health Education & Welfare
Of Peabody Coalsdon Mine - Terre Haute, Ind.

Project No.
Unit No. — Sales Project No. - G2521
Scale - 1 Pt.
Drawing No. E-4085-P1

A B C D

(P) Roof with Seal Coat

(P) Roof Stl

EL. 112'-0"

(P) Block Wall

(P) Block Wall

Suspended Ceilings Of Acoustical Tile (2'x4')

4 Pre-Finished Panels Of Mahogany Plywood Panels Fastened To Block Walls With Nails & Mahogany Strips (Typ)

Asbestos Floor Tile (Typ)

℄ (P) Stl Col.

℄ (P) Stl Col.

℄ (P) Stl Col.

13'-4" 13'-0 13'-6 13'-6 61'-4

SECTION A-A

20'-0" 35'-0"

(PA) Deming Fig. 1062-10 Well Pump w/ 3 HP Boomer # 141176

(P) Well

(P) Trailer

(P) Build.

220V

(P) Windows

Laboratory Room

Balance Room

Storage Area

Eletrical Panel

Mens Rest Room

Womens Rest Room

Septic System

18" Exhaust Fans

250 Gal Elec Hot Water Heater

Conference Room

(P) Window

Partition

Oven 115/1ph 2100W

Oven 115/1ph 2100W

(2) Urinals (2) Wash Basins

(2) Wash Basins

Part.

Dishwasher 230V/3Ph 4.5Amps

(3) Water Deionizers Ea #14-500W 115V Elect Heaters

Sink

Sink

36 Roof Vent w/ Fan

Computer Room

Supply Room

(P) Conc. Block Wall

Main Office

Coat Room

Managers Office

Lobby

Entry Table

Lunch Room

Window

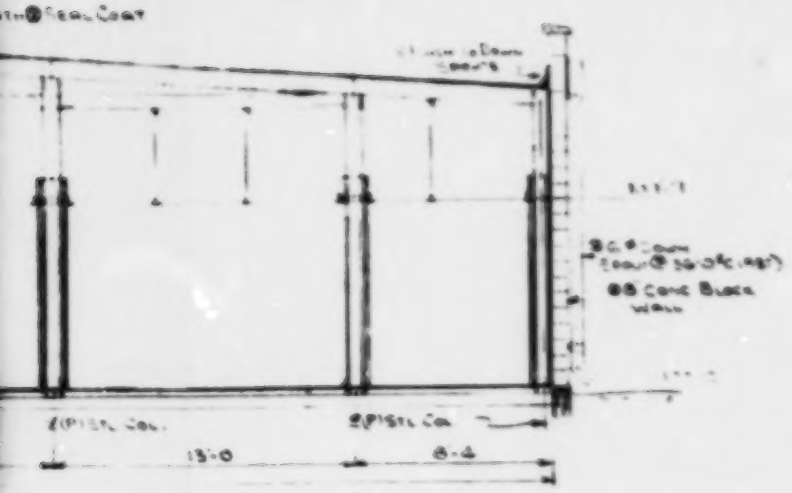
18'-0" To Preparation Plant

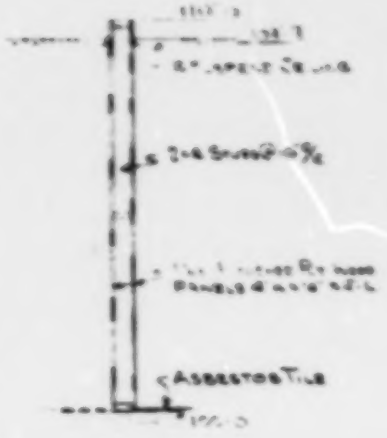
3" Finish Conc. Over Present Slab

8" Conc. Block Wall New 6" Conc. Floor Except As Noted

158'-6"

PLAN OF PRESENT TRUCK GARAGE REMODELED FOR PROPOSED PILOT PLANT LABORAT

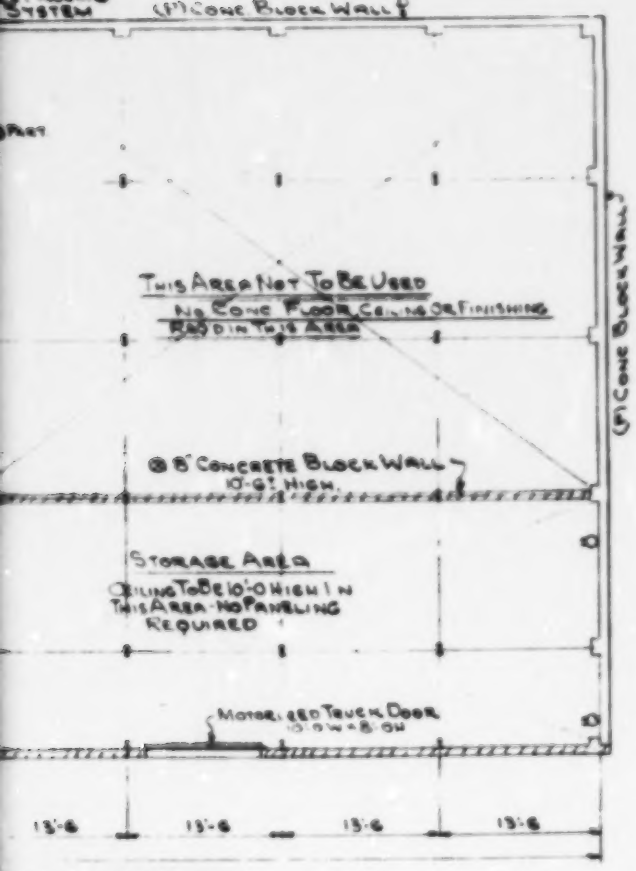




SECTION THRU INTERIOR PARTITIONS
(TYP)

STEEL COLUMNS INCASED WITH 1" THK WOOD PLANKS STAIN TO MATCH PANELING

SECTION B-B
(TYP)



NOTE:
1. Lighting To Be Recessed Floresecent
2. Drinking Water To Be Bottled
3. Electricals To Be 220/110 Volt
4. Laboratory And Rest Room Water To Be Supplied Where Reqd From Well
5. Plastic Grills To Be Installed In Suspended Ceiling For Ventilation By Roof Fan
6. Exterior Of Building To Be Painted

LEGEND
- ⊕ = S.O.G251 - (NEW)
- (P) = Present
- (PA) = Pres & Altered
- Ⓐ = New Room Type Air-Cond.
- = 8" Conc Block Walls
- ● = New Stl. Doors
- Ⓓ = " Wood "
- = Fume Hoods Each w/ ½ HP Air & Supply Blowers And ½ HP Exhaust Blowers (8 Total)
- O Electrical Outlets 115V Unless Noted

NOTE: Lighting Fixtures And Equipment Hook Ups Are Not Shown

B

A B C D

(P) ROOF WITH ● SEAL COAT

(P) ROOF STL.

EL. 112'-0"

(P) BLOCK WALL

(P) BLOCK WALL

SUSPEND CEILING OF ACOUSTICAL TILE (2'x4')

1/2" x 2" (CONT.) (TYP)

● SUPPORT TIES (TYP)

1/4" PRE-FINISHED PANELS OF MAHOGANY PLYWOOD PANELS FASTEN TO BLOCK WALLS WITH 1"x 2" NAILER STRIPS (TYP)

ASBESTOS FLOOR TILE (TYP)

(P) STL. COL.

(P) STL. COL.

(P) STL. COL.

13'-4" 13'-0 13'-6 13'-6 61'-4

SECTION A-A

20'-0" 35'-0"

(PA) DEMING F.B. 1062-10 WELL PUMP w/ 3 HP 1800 MTR. # 141176

(P) WELL

(P) TANK

(P) BUILD.

(P) WINDOWS

LABORATORY ROOM
BALANCE ROOM

STORAGE AREA

● WATER SOFTENER

MENS REST ROOM

● 18" ϕ EXHAUST FANS

WOMENS REST ROOM ● SEPTIC SYSTEM

(P) C

MANUAL

GAS FI
DES. 7
100?

(P) WINDOWS

CONFERENCE ROOM

(P) WINDOW

● PARTITION

● 250 GAL ELEC HOT WATER HEATER

(2) STOOLS (2) URINALS

(2) WATER CLOSETS

(2) WASH BASINS

DISHWASHER 230V/3Ph 4.5 AMPS

PART.

RETURN AIR AT FLOOR

(P) WINDOW

CABINETS

(3) WATER COOLERS EA. 7/4 GPH 500W 110V ELECT. HEATERS

SINK

SINK

● 36" PROP VENT FANS (2-SPEED)

COMPUTER ROOM

(P) WINDOW

● PART.

SUPPLY ROOM

(P) CONC. BLOCK WALL

(P) WINDOW

MAIN OFFICE

● PART.

COAT ROOM

MANAGERS OFFICE

LAUNDRY

● WINDOW

● WINDOW

● WINDOW

● 8" CONC. BLOCK WALL

3" FINISH CONC. OVER PRESENT SLAB

NEW ● OF CONC. FLOOR EXCEPT AS NOTED

1200'-0" TO PREPARATION PLANT

23'-6 15'-6 15'-6 15'-6 15'-6 15'-6 15'-6 15'-6 15'-6

158'-6"

PLAN OF PRESENT TRUCK GARAGE REMODELED FOR PROPOSED PILOT PLANT LABORATO

SECTION (TYP)

HI WALL O.A.I
SUPPLY AIR F
AIR UNIT AN
SUMMER

THIS A
NO
REQ

1,000,00
GAS HE
FLOOR

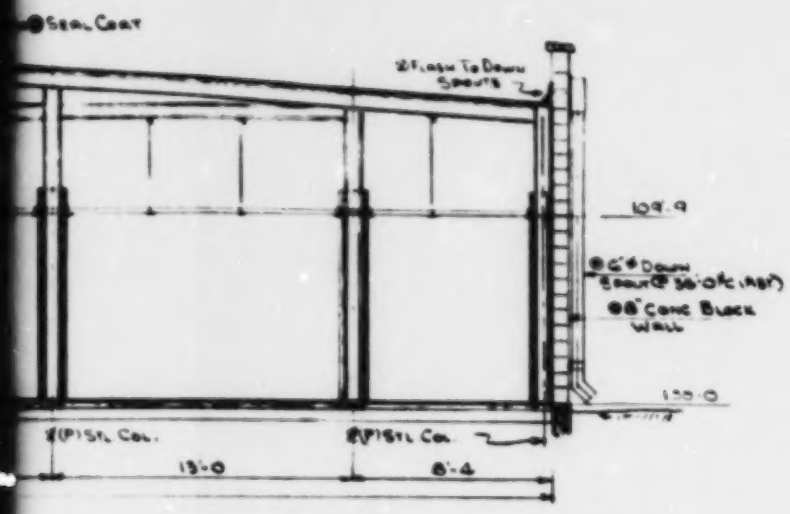
● 8'C

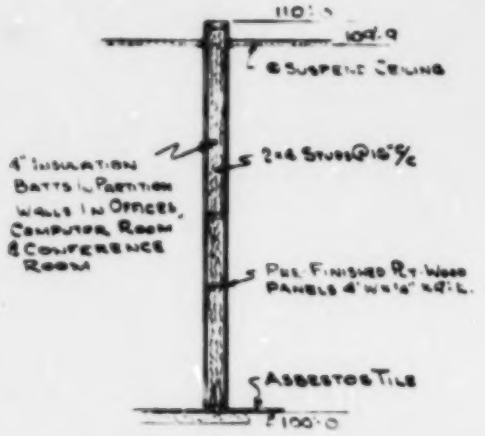
ENTRY TABLE

STORA

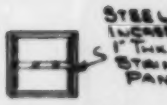
CEILING TO
THIS AREA
REQU

										3	REVISION
										2	REVISION
										1	ORIGINAL COMPLETED DRAWING
											INCOMPLETE DRAWING ISSUED ALPHABETICALLY:



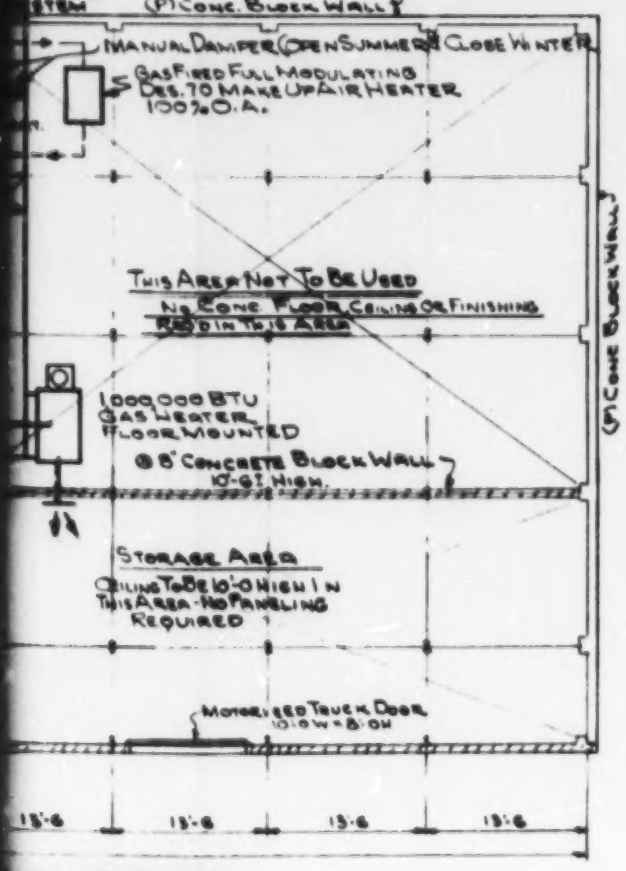

110.9
109.9
@ Suspend Ceiling
4" Insulation Batts in Partition Walls in Offices, Computer Room & Conference Room
2x4 Studs @ 16" c/c
Pre. Finished Rt Wood Panels 4'-W x 10'-H.
Asbestos Tile
100.0

Section Thru Interior Partitions
(Typ)



Section B-B
(Typ)

Hi Wall O.A. Inlet Louvre To Supply Air For Winter Make-Up Air Unit And Also For 100% O.A. Summer Vintilation


Room @
System
(P) Conc. Block Wall
Manual Damper (Open Summer & Close Winter
Gas Fired Full Modulating Des. To Make Up Air Heater 100% O.A.
This Area Not To Be Used
No Conc Floor, Ceiling or Finishing Req'd In This Area
1000,000 BTU Gas Heater Floor Mounted
@ 8" Concrete Block Wall 10'-6" High.
Storage Area
Ceiling To Be 10'-0 High In This Area - No Paneling Required
Motor Sled Truck Door 10'-0 W x 8'-0 H
(P) Conc. Block Wall
15'-6
15'-6
15'-6
15'-6
nt Laboratory

Legend For Heating Plant

- Over Head Ducts Above Drop Ceiling
- = Ceiling Diffuser
- = 3 Way Grill Boxes At Floor Level
- = Ceiling Exhaust Grill's
- = Ceiling Exhaust Fans w/ Individual Control
- = Auxiliary Electric Base Board Heaters

Controls = Thermostat + Fan Switch (Manual Vent) Exhaust Fan Summer & Exh. Fan Winter

Heating System Based On Gas Supply Of 25 P.S.I.

÷Note÷

1. Lighting To Be Recessed Floresecent
2. Drinking Water To Be Bottled
3. Electrical's To Be 220/110 Volt
4. Laboratory And Rest Room Water To Be Supplied Where Req'd From Well
5. Plastic Grills To Be Installed In Suspended Ceiling For Ventilation By Roof Fans
6. Exterior Of Building To Be Painted

Legend

- ● = S.O. G2521 - (New)
- (P) = Present
- (PA) = Pres & Altered
- = New Window Type Air-Cond.
- = " 8" Conc Block Walls
- = New Stl. Doors
- = " Wood "
- = Fume Hood Exhaust & Up Air Supply Blowers And ½ HP Exhaust Blowers (3 Total)

B

	CHL			7-12-69	McNALLY PITTSBURG MFG. CORP. Pittsburg Kansas	Proposed Coal Preparation Plant Laboratory & Offices (Heating) for Dept. Of Health Education & Welfare Public Health Service Coalton Mine - Terre Haute, Ind.

This drawing is our property and must not be used except in connection with our work — all rights of design or invention reserved

Project No. —

Unit No. — Basic Order No. — G2521 (000 000 000000)

Scale 1" = 1'-0"

No. of Sheets —

Drawing No. E-4065-P3

Sheet 1

A B C D

KELLER

R.R. MAIN LINE

Point 'A'

PRESENT PIPE FROM FRESH WATER POND #1

PRESENT FRESH WA

PRESEN OFFICE

A

32

23 24 25 26 27 28 29 30 31

= PRESENT MAIN LINE TRACKS

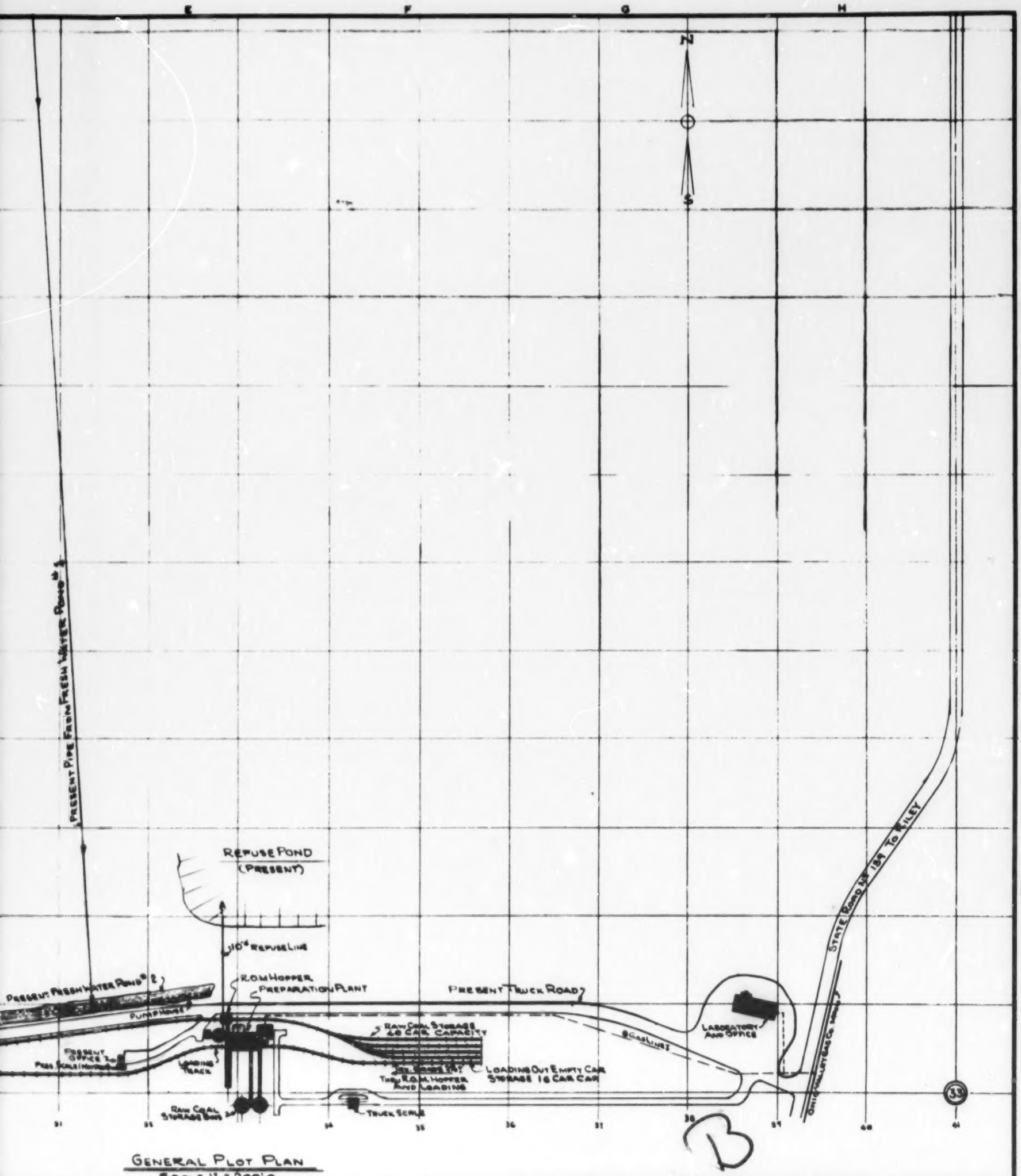
= PRESENT TRACKS REWORKED

= NEW TRACKS TO BE LAYED

= PLANT TRANSFORMERS

MACH PATT REF

SEPIA COPIES TO FOLLOWING OFFICE DATE



GENERAL PLOT PLAN

SCALE 1" = 200'-0

	CHL				7-12-69		

McNALLY PITTSBURG MFG. CORP.
PITTSBURG KANSAS

THIS DRAWING IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK — ALL RIGHTS OF DESIGN OR INVENTION RESERVED

PROPOSED COAL PREPARATION PILOT PLANT
- GENERAL PLOT PLAN -
FOR DEPARTMENT OF HEALTH EDUCATION & WELFARE
CHESTERMAN MINE - TROOP HOWE, IND

PROJECT NO.	UNIT NO. — SALES ORDER NO.
SCALE 1" = 200' - 1 PT.	- 62521 (SHOP USE NUMBERS)
	DRAWING NO. E-4065-Q
	SHEET 1